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PATHOLOGY OF CARCINOMA OF THE UTERUS.

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One out of every thirty-five women, reaching the age of thirty, die from carcinoma primary in the uterus, and that in spite of the fact that carcinoma is, to begin with, essentially a localized process and remains so for weeks, months and even years. These are the facts which have lead me to appear before you to emphasize if I may, not personal notions or new theories concerning this disease but the main known facts of the early pathology of the three principal varieties of primary carcinoma of the uterus. Because a thorough knowledge and appreciation of the early change in malignant growths must be held by the general practitioner in order to save the otherwise doomed woman affected with this dreaded disease.

I wish then to consider the occurrence, indirect causes, and early pathology of squamous carcinoma of the cervix, adeno-carcinoma of the cervix, and adeno-carcinoma of the corpus separately because to speak of them under one general heading is, to say the least, confusing and non-instructive. Then finally I shall have something to say regarding the early diagnosis of carcinoma of this organ.

But before coming to the main topic I deem it necessary to refer briefly to some main facts in the gross and microscopic anatomy which have a direct relation to cancer in the uterus: In the first place the normal cervix extends 1-1½ c. m. into the vagina as a cone shaped projection having an evenly firm consistency. The external opening is round or oval and measures about 4 m. m. in dia. The cervix, baring a narrow red zone around the external os, is of a bluish gray color. The red zone is due to the projecting mucosa of the cervical canal. In parous women the opening is larger, more slit like and is frequently torn on one or both sides. The scar tissue around the tears is firmer than the rest of the cervix. Here too the lips are frequently everted so that a wide pink zone is produced giving rise to what is known under the erroneous and misleading term "erosion of the cervix." The cervix is bound to the vaginal walls by loose connective tissue rich in blood and lymph vessels.

*Read before the Polk County Medical Society, December 19, 1911.

Other things to be borne in mind are, that the vaginal mucosa continues without change up to cover the cervical lips, that the bladder lies right against the cervix and is connected to it by a rich network of lymphatics and blood vessels. The parametrium too, receives the lymph and blood from the cervix and is in intimate connection with it. The rectum on the other hand is separated from the cervix by the pouch of Douglas.

The uterine lymphatics drain into three groups of glands viz. Those from the cervix which begin as a close meshed network finally collect into 2 or 3 big trunks which follow the uterine arteries and empty into the iliac glands. The lymphatics of the entire corpus with the exception of a small area around each cornu finally reach the lumbar glands, and areas around each cornu drain into the inguinal glands. Thus it is apparent that metastasis to the lymph glands will appear in entirely different localities depending on what part of the uterus is first involved. Bearing in mind then, the close proximity and intimate connection between the uterus and the vagina, parametrium and bladder, we pass to a more detailed consideration of the minute structure of the uterine mucosa.

The epithelium of the vagina consist of stratified squamous cells similar to that of the skin with this difference, that the cornual layer is scant or absent due to the simple fact that they are not exposed to the desicating influence of the external air. The characteristics of the normal cells is the regularity in size and shape and the fact that the nuclei are uniform in size and have a moderate amount of chromatin. This sort of epithelium continues up over the portio vaginalis, and as the external os is approached the outer layers disappear one by one while the basal cuboidal cells of the rete elongate to become the columnar cells of the cervical canal in the external os. This is what takes place in the majority of cases, the squamous epithelium usually stops at the external os. Sometimes, however, the squamous cells continues all the way up to the internal os and this accounts for the occasional occurrence of squamous carcinoma in the cervical canal. The mucosa and the submucosa of the cervical lips are richly supplied with blood and lymph.

In the cervical canal the mucosa is thrown into depressions and elevations and in the hollows the cervical glands empty. These are true compound racemose glands which extend deep into the submucosa. The surface as well as the glands are lined with a single layer of tall columnar cells having oval or round nuclei near their base and a cytoplasm which strains with haematoxylin. This is due to the fact that the secretion which both the surface and the gland cells contain is mucous. The glands are also well supplied with blood vessels and

lymphatics. Now as a rule this type of epithelium is found between the internal and external os, but as has been noted, the squamous cells may reach the internal os, and at times the glandular epithelium may extend for some distance below the external os.

The epithelial lining of the corpus is again different from that of the portio and the cervical canal. It consists of a single layer of ciliated columnar cells which line the cavity and in numerous places dips down into the underlying tissues and forms hollow cylinders, pot holes if you please. These are the so-called uterine glands which probably are not glands at all but simply a special epithelium modified for the regeneration of the uterine lining after parturition. These cylinders are narrow and rather tortuous after menapause. They too have a single layer of these ciliated columnar cells having an eosin loving cytoplasm and oval nuclei lying near the center of the cells. After menapause the uterine arteries undergo obliterating endarteritis, the more sensitive muscle cells atrophy; there is proliferation of connective tissue and contraction of the uterus, with compression of the lymph spaces; in short the organ becomes the small senile uterus having a scant blood and lymph supply and where the fibrous tissue forms a firm barrier difficult to penetrate by malignant cells.

I have gone into such details in describing the minute structure of the mucosa because carcinoma always begins here and since the uterus has three kinds of epithelium differing both histologically and physiologically it necessarily must follow that there must be three different kinds of cancer, the structure and clinical manifestations of which are widely different.

Now carcinoma is a growing wild of the normal epithelium, whatever the real cause might be. Just why the cells hitherto controlled by what, in want of a better term we might call, vital inhibitory force, should suddenly escape, makes but little difference as far as our purpose goes. This one thing is certain, the cells grow wild in carcinoma and when it is squamous cells which undergo this change, squamous celled carcinoma of the cervix results and if the glandular cells are involved the tumor becomes an adenoma of the cervix and an adenoma of the corpus develops when corpus cells become malignant. We are now ready for a more detailed consideration of each kind.

Squamous Carcinoma of Cervix.

According to Webster about 98 per cent carcinoma primary in the uterus is of this type. It is the most important as well as the most accessable variety of uterine cancers. It may start in the cervical canal when the squamous cells extends all the way up to the internal os, which rarely is the case. In the great majority of cases it begins somewhere in the portio vaginalis. This type of cancer seems to have a

definite relation to menapause for the great majority of them occur between the years of 40 to 45. Squamous carcinoma has the same relation to trauma as that of its pathological sister the epithelioma of the skin, that is 49 out of Kelly's 50 cases had borne children and the fiftieth had had her cervix repeatedly dilated instrumentally. Most of the women had several children.

Now then when a woman of the right age is unfortunate enough to develop a cancer in her portio vaginalis the changes taking place are as follows: Some part of the epithelium suddenly grows wild, a rapid proliferation of cells take place. The cells crowd each other giving rise to a packed appearance so characteristic of malignancy. All cells take part in this mad proliferation resulting in cells of very irregular shape and of a varied size having nuclei staining densely. As the cells still multiply the new growth begins to extend in all directions but most along the lines of least resistance. The growth gradually presses the surface cells into the lumen of the vagina and finally break through the surface and a teat like growth projects into the vagina. Meanwhile the malignant growths has extended locally and down deeper into the tissue sending octipus like arms in the direction of the vagina, the bladder and the parametrium. The irritation set up by these malignant cells lead to the same changes as any other irritation, namely a round cell infiltration and a proliferation of capillaries.

If a woman is fortunate enough to be examined by a competent man at this stage he will observe the following deviations from the normal. Part of the cervix feels firm and indurated and he may be fortunate enough to feel a rather rough spot. When the examining hand is withdrawn it is bloody and a slight hemorrhage may follow the manipulation. When the cervix is exposed the indurated area looks as if ready to burst and the rough spot may be seen to be composed of villous like projections being about 2 m. m. in length and one in thickness. Now if a portion of this tissue be removed for histological examination as it should be, it will cut with resistancy, and from its cut surface masses of cells, the so-called cell nests can be scraped leaving a glistening network of stroma.

Microscopically the advancing edge of the growth is seen to consist of closely packed irregular cells having densely stained nuclei varying greatly in size. The deep parts of the cancer appears as oval or round masses consisting of the same type of irregular cells and the center of some of these may suggest and actually be epithelial pearls. These however are scarce for reasons already given. The surrounding tissue shows abundant round cell infiltration and a large amount of blood capillaries. The teat like surface projections consist of central connective tissue, cores also rich in poorly protected blood capillaries.

The outer part of each villus is composed of the malignant epithelial cells similar in all respects to those already described. Mitosis is more or less common in all these cells.

Unfortunately the malignant growth is rarely discovered at this stage, the woman often fails to seek medical aid and the growth is allowed to go on. The mad proliferation continues, the growth extends in all directions, but since expansion is less interfered with on the surface the growth is most rapid here. The villi grow larger and larger and their adjoining bases meet and fuse forming the well known cauliflower projections into the vaginal lumen. During all this rush the blood vessels vainly endeavor to supply nourishment to the new cells but signs of failure on part of the vascular system soon manifest themselves in form of dilated capillaries having thin unprotected walls, so that they often lie naked against the brittle cancer cells, thus leading to hemorrhage upon the slightest tough. The time soon comes when the formation of new capillaries can no longer keep pace with the ever increasing number of new cells. Hence large numbers of these are pushed beyond their supply and degenerative processes at once set in, leucocytes flock to the scene, putrefactive and other bacteria enter and the carcinoma is well on the road of degenerative sloughing leading to the altogether too well known carcinomatous ulcer.

There is no need of going into the further pathology of squamous carcinoma: The growth extends in ever widening circles. The cervix is gradually sloughed away, and secondary growths appear in the vagina, the parametrium and the bladder. Fistulous tracts are often established between the later organ and the vagina, since the cancerous tissues are so apt to break down. Metastasis to distant organs are late in this variety and strange enough secondary growths in the lymphatic glands are rather seldom seen, and right here I wish to say that enlarged lymph glands are not by any means always cancerous. Investigators in the John Hopkins Laboratories have made large numbers of serial sections through such glands and have found half of them free from cancer cells. When the lymph glands are involved it is of course the iliac ones.

Remembering then that epithelioma of the cervix occurs in women who have borne children and that this type is by far the most frequent variety of carcinoma of the uterus we pass to the most malignant but fortunately rather rare variety, the adeno-carcinoma of the cervix.

Adeno-Carcinoma of Cervix.

From the structure of the cervical mucosa it is plain that this type may begin at any place between the external and the internal os, and may spring from the epithelium covering the surface or from that lining the glands. As a matter of fact it usually begins in the glands like

its fellows the squamous carcinoma of the cervix, this kind too is found in parous women and most frequently in the climateric age.

It is obvious that the clinical manifestations and symptoms of this type will vary greatly according to its locations. Thus if the tumor starts near the external os it will behave very much like the squamous type, if on the other hand its origin is in a gland near the internal os its development will be cryptogenic until the very last stages. Whatever be its point of origin the development progresses along these lines:

This is again a riot of epithelial cells and usually of some of the gland cells. This leads to a dilitation of the gland lumen so as to give room for the new cells. The lining which to begin with was single now becomes many layered and since the rapid formation of cells never ceases, projections extend into the lumen to meet similar buds from the opposite side. In this way cellular partitions are formed dividing the gland into what appears to be 10 to 20 new glands. As the cells further increase they lose entirely their original shape, become polygonal or polymorphous so that when they finally fill the spaces completely they are very similar to the solid cords of squamous carcinoma.

So far I have limited myself to the changes going on inside of the gland lumena for the reason that the sac-like covering of connective tissue surrounding each gland is made thicker by the proliferation of connective tissue set up by the malignant growths and has a decided tendency to keep the cancer within the gland, thus producing a distinctly nodular growth differing from the filamentous extensions of the epithelioma. Sooner or later, and usually sooner, the malignant cells break through the capsule and invade the surrounding tissue retaining however its tendency to form nodules.

The clinical manifestation of cervical adenoma at this stage vary and are as has been mentioned, entirely dependent on its location. If at the internal os no signs and symptoms can be detected. If near the external os one or the other of two things happen, either the growth invades the cervical lips which feel indurated and irregular but do not bleed as was the case of squamous carcinoma, or it may extend through the external os in a polyp-like mass which develops into a cauliflower growth bleeding readily and differing in no gross way from the first described varieity of cancer.

If the tumor is examined microscopically at this stage the main nodule will be found to consist of irregular cells wholly different from their parents, the columnar cells lining in glands. Atypical mitosis is frequent among these cells. It is only in the more recent smaller surrounding nodules that the glandular structures are still preserved. Here the nuclei stain densely. In the surrounding connective tissue

there are numerous groups of small round cells and the capillaries are abundant for the same reasons as for the squamous cancer.

Breaking down is late in adeno-carcinoma of the cervix and the reason is near at hand. Whereas in the squamous type most of the cells are many layers of cells away from the capillaries, in the adeno-carcinoma most of the cells lie right against the lymph spaces or are at most only a few thickness of cells away. However though degenerative changes are slow to come they are sure and may first be apparent after extension has taken place into neighboring organs. When sloughing has set in the cervical canal presents a worm eaten appearance due to the fact that certain areas have sloughed where others remaind untouched.

This type of tumor grows rapidly and extension into vagina and parametrium occurs early. But the formation of fistulae are rare here. Extension by means of the lymphatics is more frequent than in squamous carcinoma, metastasis into liver, lungs, ovaries, etc., occurs.

Adenoma of the Corpus.

This third variety of carcinoma of the uterus, that of the corpus, differs etiologically and structurally as well as in degree of malignance, widely from the squamous and the adeno-carcinoma of the cervix.

This tumor is not often found in women who have borne children, on the contrary it is most frequent in sterile females, and is often found associated with fibroids, this association may, however, be purely an accidental one since fibroids are most frequent in childless women. Cancer in this part of the uterus occurs as a rule later than the other varieties, being most frequent between 50 to 60 years.

The rioting proliferation of the epithelium begins oftenest among the cells lining the uterine cavity. Usually it is to begin with a localized process but may spring simultaneously from the entire endometrium. Since the underlying tissues are rather firm the multiplying cells are thrown into folds or villous like projections. The cells lining these, though a single layer to begin with, rapidly become stratified, their nuclei are very pale and as they increase in numbers they tend to assume more and more the polygonal shape of the squamous epithelium. The villi or folds, soon grow together at their base and it is in this way a tumor projecting into the uterine cavity is formed. As the underlying arteries are few and have undergone partial obliterating endarterites the malignant cells soon exhaust the blood supply and sloughing followed by putrefactive infection soon occurs giving rise to an abundant, very foul discharge. So that the woman appears as if actually rotting away.

Of course extension of the malignant cells slowly but gradually occurs until finally the peritoneum is reached at a very late date, and

now a generalized carcino matosis may occur. Metastasis through the blood stream into distant organs do occur although at a late period.

Other rare varieties of carinoma which must be mentioned at this point are first of all chorionepithelomia, a tumor from fetal cells occuring in young women, often after hydatidiform mole and is of a very malignant character. There is a so-called malignant adenoma characterized by being structurally alike to the normal uterine glands that have been described, and finally there are scirrhous and colloid cancers, merely modifications of the main types of carminoma.

Thus we see that there are three distinct varieties of carcinoma of the uterus one of which the adeno-carcinoma of the corpus is a slow growing tumor which can be cured by a timely radical operation in the majority of all cases (60 per cent). Another fortunately rare kind, the adenoma of the cervix is, because of its great malignancy and its location difficult to eradicate. But the third, the most frequent type can and *should be converted* from the well nigh fatal disease it is today, into a cancer yielding every bit as high a percentage of permanent cures as that of the adeno-carcinoma of the corpus. This is possible through a keen alertness on part of the family physician and a thorough microscopical examination of all suspected tissue.

In an excellent paper read before this body by Dr. Minassian the need of the women being educated by their family physician was made so plain that there is no need of saying anything about this point here. I simply wish to state that during the critical period of a woman's life she should be examined at regular intervals and the medical man who is too timid to insist on a thorough vaginal examination when the least amount of suspicious discharge is present had better seek newer fields and greener pastures, there is no need for such a man in the profession. Whenever anything abnormal is found, a microscopical examination should be made every time. It is little short of manslaughter to fool away time by douching and penciling the so-called erosions of the cervix when perhaps the woman's life might be saved by, and operation made possible through an early diagnosis.

In our days when laboratory facilities are everywhere at hand, every uterine scraping should be examined as a matter of routine. Thousands of women have been saved from an untimely death and thousands more will be, when the general practitioner becomes thoroughly aware of the prophylactic value of this measure.

Whenever there is anything suspicous about the cervix a piece should at once be removed for diagnostic purposes. Under gas or local anaesthesia a piece of the cervix containing some of the underlying connective tissue should be removed. It is wrong to secure a flake

of the surface epithelelium and then expect a pathologist to make a correct diagnosis. A cut should be made down into the submucous tissue and then another parallel to the first about 1-m. m. away from it. Then a piece removed by connecting the deep ends of the incisions.

Now by the aid of a freezing microtome, found today in all larger hospitals and ought to be in all small ones, a diagnosis may be returned in ten minutes and the patient need not leave the table. When such haste is not requested the tissues should not be placed on gauze to dry as seems to be a common custom but at once be placed in a fixative fluid, any one of which will do. Formalin is found in all hospitals and a 5 per cent solution is an admirable fixing agent and if formalin is not present 95 per cent alcohol is, and that does very well. By this method diagnosis may be made in 24 hours if necessary. If the tissue must be sent away to a pathologist it should always be accompanied by the main clinical facts and the organ from which taken should be mentioned. The pathologist cannot under all conditions return a reliable diagnosis without this.

Gentlemen, I have tried to show you that there are three main varieties of carcinoma in the uterus. And that one of them, the squamous carcinoma of the cervix forms about 98 per cent of all of them. That this form is now disgracefully fatal and that it can be made a curable disease, saving thousands of women by a religious alertness on part of the family physician and a misroscopical examination of all suspected tissue.

HEALTH RULES.

Having consulted William Muldoon, Eugene Sandow, Dr. Woods Hutchinson, J. Pierpont Morgan, Mayor Gaynor, Dr. William Robinson, Upton Sinclair and many other well-known authorities on health, we are enabled to present the following rules, these being the latest consensus of opinion:

Eat nothing.

Eat everything you want.

Walk at least ten miles a day.

Do not stir unless you ride in a carriage or some other vehicle.

Don't worry.

It is absolutely necessary that you study yourself. Remember, you are an animal.

Chew food until nothing remains.

Bolt everything. Only in this way will your stomach keep strong.

Never go on a vacation.

Change is absolutely necessary.

Eschew alcohol and tobacco.

Smoke all you want to. Drink everything.

Keep cool.

Perspire profusely.—*Life.*

THE PROPHYLAXIS AND CURE OF CARCINOMA OF THE UTERUS.

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Few women consult a physician during the earliest period of this disease and confessedly for good reasons: (a) The early manifestations are insignificant and are readily ignored. (b) While a vast amount of information has been imparted to the public through various avenues regarding the early symptoms of tuberculosis with the result that the reading public have a reasonable degree of knowledge of the early subjective symptoms of pulmonary tuberculosis, cancer with its frightful mortality has received but little attention in this educational crusade. The ignorance of the public on this subject is therefore necessarily dense. An epithelioma on the lip may cause suspicion of malignancy, but a persistant leucorrheal discharge or occasional slight bleeding after exertion, a douche, or coitus, will rarely cause a prompt visit to a physician's office.

How many of us have taken the pains to instruct our private patients along these lines? Or, more to the point, given a patient with an old cervical laceration, with everted os and hypertrophied glandular structures and erosion, do we always advise such patients of the need of surgical prophylaxis, or at least of frequent examinations?

Usually it is the onset of symptoms of an alarming nature—i. e. an intolerably fetid discharge or continuous hemorrhage that compels her to seek medical advice.

We should teach women that although uterine cancer is most common after thirty-five, no age is exempt from it. And that excessive vaginal discharge, menorrhagia, slight or profuse irregular hemorrhages require investigation.

After one year's educational campaign in Prussia, five years ago, Winter reported that: (a) The proportion of carcinoma patients who consulted a physician within three months after the appearance of symptoms was raised from 32 per cent to 57 per cent, and (b) that the proportion of patients operated upon within two weeks after the first consultation increased from 78 per cent to 90 per cent, and (c) operability in patients seeking treatment was raised from 62 per cent to 74 per cent.

Enlightenment of the public is the first step of progress in the control of this disease and therefore every available medium should be utilized for the dissemination of such knowledge.

But the greater responsibility of the physician is his ability to recognize malignant disease in its beginning. If the cervix uteri is

free from erosion, ulceration and induration, and there is no chronic pathologic discharge nor hemorrhage from the uterine cavity, we may safely assume that neither carcinoma of the corpus uteri nor of portio-vaginalis is present. But, given any one of these signs and the question of differential diagnosis arises. It is needless to recount in this discussion the steps of differential diagnosis of uterine carcinoma but in passing I wish to emphasize four points:

(1) That although this is a disease of middle life, it occurs at all ages.

(2) That while parous women with cervical trauma form the majority of victims, the condition is not rare in non-parous women.

(3) No valuable time should be wasted in a doubtful case but laboratory assistance secured by submitting scrapings or sections of cervical tissue for microscopical examination.

(4) When a diagnosis of a small Fibromyoma of recent origin has been made, possible cancerous degeneration must receive due consideration. This is especially true if the tumor is of the Fibrocystic type.

If a diagnosis of carcinoma uteri has been made, then arises the momentous question of operability. The criteria upon which a safe judgment may be based in determining operability are two:

(1) Primary mortality.

(2) Ultimate results.

If there is any variation of conception of operability among surgeons it is because one or the other of these criteria is ignored. A surgeon who considers a low primary mortality as the more important item and ignores ultimate results will have a high percentage of operability, while another with whom cure or at least late recurrence is the chief aim will find fewer cases operable and report a higher primary mortality. A case eagerly accepted for operation by the former will be promptly rejected by the latter. Others occupy middle ground. To form a correct judgment on these two points it is necessary to make a careful study of the various elements presented by each individual case. For after all, operability from the viewpoint of low mortality and high percentage of cures, is dependent upon careful selection of cases for operation. In making such selections we must especially consider: (a) The absence of serious contra-indications such as chronic cardiac and renal disease, diabetis, extreme old age etc., (b) Type of cancer: 1. Adeno-carcinoma of the body of the uterus is least frequent, least malignant, has highest average age, slowest growth, remains confined to the uterus for a comparatively long period, and occurs in nulliparous as often as in parous women. 2. Squamous celled carcinoma of the portio-vaginalis is next in degree of malignancy

and commonest type, (70 per cent +). 3. Adeno-carcinoma of the cervical canal has the highest malignancy with the most rapid growth. (c) Extent of involvment. The ideal period for operation is when cancer is strictly limited to the cervix or uterine body. However, this golden opportunity rarely presents itself. The disease rapidly invades other structures by various modes of extension: 1. By continuity. This is the early and chief mode of extention. The cancerous process pierces into the structures adjacent attacking earliest the parametrium near the junctures of the cervix and vagina. The growth extends in all directions, upward, downward, posterially and laterally. Thus the pelvic lymph spaces, the uterine ligaments, the ureters, the bladder, rectum, vaginal wall and uterine fundus, tubes ovaries, etc., are involved. 2. Lymphatic metastasis. This is a late mode of extension, few early cases showing lymph node carcinoma. More than half of all operative cases show pelvic lymphatic metastasis and a few abdominal metastasis. 3. Latest and least important from the standpoint of surgical treatment is metastasis by way of the blood stream.

When we have determined the type of cancer and the extent of involvement of neighboring structures we will classify the case as operable if there is a reasonable chance for the removal of *all* the carcinomatous tissues without too great risk. Otherwise no operation should be attempted and the patient should be let alone. An operation that does not aim at and achieve a total dissection of all cancerous structure, no matter what structure, is worse than useless, and leaves the patient in a pitiable condition. A radical operation after the method of Wertheim admits of an operability of from 35 to 65 per cent of all cases in the hands of American and Continental operators with a primary mortality of 13 to 20 per cent, cures of three to five years of 36 to 58 per cent and absolute cures of 8 to 21 per cent of cases. (Jacobson.) These figures lift uterine cancer from total hopelessness to a level of moderate degree of curability. Undobtedly further progress will be made in the technique of the radical operation that will still lower the primary mortality and increase the number of absolute cures. This is all that we can hope for, until that happy day arrives when we shall know the real cause of cancer and with it, its scientific cure.

THE CARE OF THE EXPECTANT MOTHER.*

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Nowhere in the practice of medicine is prophylaxis of so much importance as in the care of the expectant mother.

Unfortunately the general practitioner, as a rule, has little to do with the management of pregnancy except when a complication arises and he is called to see the case.

The border line between health and disease is less marked during gestation and a slight accident or illness which would be of no consequence under ordinary circumstances may give rise to conditions which threaten the life of the mother or child or both.

Aside from the accidents incident to pregnancy—the most important and serious being rupture of an extra uterine pregnancy, rupture of the uterus, premature separation of the placenta and placenta praevia, the pregnant woman is exposed to the same possibility of injury as at other times.

Formerly surgical operations were almost never performed during pregnancy but now whenever a condition arises in a pregnant woman which imperatively demands surgical treatment, the necessary operation should be performed without hesitation. However if the indication is not pressing it is advisable to wait until after labour so as not to subject the patient to an added strain.

The complication of pregnancy and a chronic organic disease is usually worse for the patient than the complication of pregnancy and the acute infectious diseases.

A partially destroyed lung may suffice for the respiration of an ordinary individual but will be unable to meet the demands of the latter months of pregnancy.

A woman may not know she has a cardiac lesion or may lead a very comfortable existence until the increased demands upon the activity of the heart during pregnancy bring about broken compensation.

Pregnancy in patients suffering from nephritis is always a serious complication. Chronic diseases of the circulation, the kidneys, nervous system, blood and skin add varying amounts of risk to pregnancy and form complications which must be met as they arise.

Much may be done to prevent accidents and much more to prevent the acute infections but when a woman with a chronic organic disease becomes pregnant we have a condition thrust upon us which requires most careful management to save the lives of both mother and child.

My paper, however, is concerning a normal pregnancy and no special complication so I will take up the management of an ordinarily healthy expectant mother.

*Read before the Wapello County Medical Society.

In regard to exercise, as a rule, very little change should be made in her mode of living. A woman cannot develop muscle during pregnancy—she should have done this before. Walking in the sunlight and open air is the best exercise.

If the woman is accustomed to out door sports she may keep them up in a moderate degree. While some obstetricians oppose active exercise or out door sports, I believe it depends altogether upon the amount and kind of exercise the woman took before she became pregnant. I know two physical dircetors who taught their classes and did exactly the same kind of work during the first half of pregnancy that they did before they became pregnant—both had normal, comfortable pregnancies and especially easy deliveries. I know one woman who did considerable rowing during the early months with no bad effects whatever. Of course these women were keeping up their usual habits. No woman could do these things unless they were accustomed to doing them every day. Sewing on the machine is bad. Long journeys on railway trains and by trolly should be avoided if possible. Automobile riding over rough roads is bad for some people and it is a question how much harm it is going tc do in the future.

Diet and Drink.—The diet should be simple but not strict. Meat should be cut down to once a day, substituting milk and eggs. She should eat cereals. All ripe fruit and vegetables in season, especially fruit to loosen the bowels such as dates, prunes and figs. Starches fried in fat should not be eaten. Tea and coffee in moderation if the woman is accustomed to them. All alcoholic drinks should be prohibited on account of contracting the liquor habit and of the bad effect on the offspring.

If the kidneys are over burdened and the heart muscle not strong, great quantities of water should not be given. It is safer to confine the diet to milk. The carbonated waters often benefit the nausea during the early months. Buttermilk should be used freely.

The bowels should move daily. If the fruit in the diet does not suffice, cascara or compound licorice powder should be given. Enemas and salines should be used only for temporary purposes and should not be given for the daily bowel movement.

The kidneys demand especial care. The urine should be examined often during the latter half of pregnancy. I believe many cases of unaccountable miscarriages are due to nephritis and that nature is trying to protect the mother.

The presence of headache, pain in the stomach, increased pulse tension and indigestion make an examination of the urine imperative. Don't wait for the odema. In examining the urine of pregnant women we should always determine the amount of urea being excreted and

should always examine a specimen from a carefully measured 24 hr. specimen.

The question of bathing depends almost entirely upon what the woman's custom was before she became pregnant. Baths extremely hot or cold should be avoided. Chilling should be especially avoided. Some women starve themselves the last three months to restrain the growth of the child. Certain books advise Prochownik's special diet to reduce the bone salts in the skeleton of the fetus and insure an easy labor. It is questionable whether the desired effect could be obtained without first injuring the mother and further the child would probably suffer from rickets. In women with contracted pelvis a specially restricted diet has been tried with a view to restraining the development of the child. The results vary. It is claimed that the women who follow it consistently have small but perfectly developed children. But in practically all cases where it has been carefully managed by the physician and carried out to the end of pregnancy the confinements were easy in comparison with previous labors and the babies were nearly all born alive although most of the mothers had had still-births previously. The majority of the children were lean and the cranial bones were unusually mobile upon one another and heads moulded easily.

Then length and head measurements of the babies were normal and the normal gain in weight took place in the children. The diet seemed to exert no bad influence upon lactation.

The large amount of nitrogenous food, and the small quantities of fluid of Prochownik's diet favor the toxemia of pregnancy and the diet often has to be abandoned on this account.

Prochownik's diet is as follows:

Breakfast.—Small cup of coffee; two slices toast (1 ounce).

Dinner.—Small piece of meat or fish or 1 egg; a little sauce; vegetable prepared with fat, lettuce, small piece of cheese.

Supper.—The same with a few slices of bread and butter and a little milk.

Water, soup, potatoes, pastries, sugar and beer are forbidden. About a pint of water daily is drunk.

Those who advocate this diet say that it should be adhered to during the last six or eight weeks only and always under medical supervision.

For constipation during pregnancy have the patient go to stool at a certain hour each day—usually shortly after breakfast. Often a glycerine suppository is all that is needed to produce a movement. Every night just before retiring let the patient inject 2 to 4 ounces of warm olive oil into the rectum. It remains in the rectum over night, soothes the mucosa and allays a possible spasm of the bowel. If this is

not sufficient let her eat prunes, figs and dates, warning her to chew them thoroughly. Let her begin with one prune the first day, increasing one each day up to ten—then decrease to one and up again. As De Lee says—there is some mental suggestion in this. If it is necessary to use drugs, fluid extract of cascara is the best. Should begin in capsules and increase a drop each day up to thirty drops.

Clothing.—The clothing should be simple and warm under clothing to protect the surface of body well with no pressure on the womb from above downward but rather support from below. There must be no round garters, tight skirt bands or tight corsets. The question most frequently asked regarding clothing is whether or not a corset should be worn. The ordinary corset most certainly should not be worn after the uterus rises out of the pelvis but several corsets or waists especially designed for pregnant women are now on the market. Some of these are very soft and flexible, support the uterus from below and may be worn except during the very last part of pregnancy. In the latter half of pregnancy most women get a great deal of comfort from a well fitting abdominal supporter. This helps the abdominal wall to carry the weight of the child and may aid in preventing the weakness separation of the recti muscles.

For the prevention of "high stomach" after labor much may be done by wearing an abdominal binder, properly fitting maternity corset, low healed shoes and attention to the bowels. Low healed shoes especially should be worn because the increasing size of the uterus tends to pull the trunk forward and the woman throws her shoulders back and straightens her neck—this makes a sharp angle in the middle of the back—if in addition the pregnant woman wears high heels the trunk is pushed still further forward and the head and shoulders must be thrown farther back, making a sharper bend in the lumbar region—this causes pain in the back and bearing down sensations in the abdomen.

The binder after labor does not prevent a "high stomach" but it does give the patient comfort. The most benefit obtained from it is when the patient first leaves the bed. An elastic binder or an ordinary Scultetus binder may be worn.

Breasts.—The care of the breasts should begin in early girlhood. Many cases of retracted nipples are due to the pressure of the clothing during the development of the girl when the breasts are increasing in size. During pregnancy if the breasts are large and heavy a supporter should be used. There are very good, comfortable breast supporters on the market. The surface should be washed daily, the nipples anointed with cocoa-butter and the branny scales removed. No strongly astringent washes or alcohol should be used. The nipple should not be hardened but kept soft and pliable. If the nipples are

flat, gentle attempts may be made to draw them out night and morning. During the last two months the nipples should be bathed night and morning with a boric acid solution. If the nipples are cracked or fissured use 2 per cent silver nitrate.

Mental Condition.—The pregnant woman should avoid mental fatigue and excitement. She should read good books, avoiding medical subjects. Statistics prove that the mothers of great men nearly always were characterized by more than ordinary intelligence and good sense and that great minded fathers less often procreate children that become great. There is a popular notion handed down from generation to generation that the mother's condition of mind will affect her unborn child both mentally and physically. If the mother believes that the reading of good books and the studying of good pictures will make her child intelligent or artistic and that the study of mechanics will make her child mechanical, it should be encouraged because it adds to the welfare of both.

While we all hear a great deal about maternal impressions we have no scientific basis as proof. There exists no direct connection either nervous or vascular between the mother and child. We do know however that freight or shock may so alter the milk of the mother that the child will have convulsions, so fright or shock may produce an undesirable condition in the child.

The fetus is fully formed at eight weeks and the thing to which the deformity is attributed usually occurred during the latter months or weeks of pregnancy and had nothing whatever to do with it.

The expectant mother should be guarded against worry and trouble and should be encouraged and assured that all will be well. She should have congenial, agreeable companions and not have associates who tell about the difficulties and dangers of confinement and relate horrible cases.

If there is a tendency to melancholia or any history of insanity in the family this should be kept in mind but we must always remember that physical and mental lassitude, alterations in character and dispositions and even melancholia are usually not due to the whims of pregnancy but are due to toxemia and must be treated as such.

Watch for symptoms of toxemia all the way through and don't misinterpret the early warnings because the life of the patient depends upon early appropriate treatment.

LABOR IN DEFORMED PELVIS AND ITS TREATMENT.

HERBERT MARION STOWE, M. D.

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The treatment of labor in deformed pelvis presents many considerations to the obstetrician and requires an inmate knowledge of mechanism and complications to carry both mother and child to a successful delivery. The frequency of pelvic deformity sufficient to produce dystochia in labor is such that every general practitioner should possess the ability of correct diagnosis and be able to institute a safe treatment.

To attempt a relatively complete exposition of this subject is impossible at the present writing and therefore many omissions must of necessity occur.

The ability to recognize pelvic deformity is as necessary to the obstetrician as auscultation and percussion are to the internist: Every woman should be measured externally, and internally if necessary, at the 30th week of pregnancy as a routine measure. Thus by constant practice we acquire a greater familiarity with the pelvis and detect deformities that otherwise would especape our notice until the advent of late labor. While pelvic deformity may occur in women of normal build, the detection of a pendulous abdomen during the first pregnancy, fetal malpresentation, non-engagement of the presenting part and early rupture of the membranes should lead to a careful examination of the conditions present.

The value of external pelvimetry is only relative and accurate deductions therefrom are impossible. The internal examination is productive of the best information but the method demands considerable experience. It is impossible to judge from the true conjugate alone as to the degree of dystochia or as to the prognosis of labor in a given pelvis. We must consider the form and outlines of the inlet and outlet.

If rachitis is the etiological factor, we find the short true conjugate generally below 9 cm., the increased by-ischiatic diameter, the changed relation between the interspinous and intercristous measurements, the change in the curve of the vertical and transverse diameter of the anterior surface of the sacrum and marks of rachitis in other portions of the body.

In shortening of the true conjugate, we must consider the simple flat, rachitic and generally contracted pelvis. The estimation of the transverse of the inlet with the internal pelvimeter requires experience. The obstetrician depends mainly on the internal examination with the hand either during labor or after delivery has been accomplished. If the delivery has been especially difficult or if the child has been lost, a

careful exploration of the pelvis is of great service in future labors. The simple flat pelvis is characterized by a moderate contraction of the C. V. up to 9 cm. and an absence of the signs of rachitis. The internal finger palpates the anterior and posterior walls of the inlet but reaches the lateral walls with great difficulty if at all.

It is more difficult to recognize the generally contracted pelvis because of a lack of positive points of diagnosis. Shortening of the external transverse diameters to under 24 and 27 cm. points to general contraction. A small pelvic outlet combined with a narrow pubic arch—funnel shaped pelvis—is found associated with general contraction. An internal examination reveals the small round inlet while the mechanism of labor—marked cephalic flexion, assists in making the diagnosis. A woman of small stature without special abnormalities makes one suspicious but the condition may also be present in large women. The C. V. is never under 8 cm. but the presence of transverse shortening makes the passage of the fetus especially difficult and tedious. Many extractions that have turned out surprisingly difficult will be found on closer examination to be due to general contraction of the pelvis.

If the patient has borne one or more children, the length of labor, size of baby, moulding of the head, complications and the fate of the child are of great value. The best pelvimeter is the fetal body.

When we have ascertained the degree of pelvic deformity as carefully as possible, we must now consider another important factor—the fetal head, its size, form and consistency. To determine the size of the head is a difficult proposition. External measurements are unreliable. If one is able to grasp the head by the entire hand in utero and at the same examination measure the pelvic inlet he can decide as to the degree of disproportion. This also requires experience and rich clinical observations. We can estimate the consistency of the head when the membranes have ruptured and the head lies over the pelvic inlet. The yielding bones of the eight month's child stand out in marked contrast to the hard and resisting head of the post mature baby. It is also difficult to determine the form of the head. Everything depends upon the transverse diameter. For the flat pelvis the narrow dolicocephalic head is far more favorable than the broad brachycephalic one. The fronto-occipital diameter can be fairly long without interfering with the mechanism of labor. Attempts have been made to measure the fetal head directly before delivery but not with encouraging results. McDonald, Stone and Hirst have devised rules for obtaining the bi-parietal from the occipito-frontal diameter measured externally. Peret's cephalometer is useful for this purpose.

Besides the factors of pelvic deformity and the fetal head, we have

a third most important one—the powers of labor. We can judge of the degree of disproportion present better during the course of labor than before. If the cervix is effaced, the os dilated and the membranes ruptured, the soft parts will not prevent the head from coming down into the pelvic inlet. After the first few contractions of the second stage, the head settles over the inlet as the various diameters permit. After the mature rupture of the membranes, the patient should be examined as at this examination the future conduct of labor is often settled. A great deal depends upon the pains. The character of the uterine contractions in the first stage or previous labors is of assistance in the prognosis. In many women, especially the small rachitic ones, the pains are strong and increase in vigor as labor proceeds. On the other hand, large strong women may have weak pains throughout—primary weak pains. We cannot judge of the probable efficiency of the pains from the general physical development of the patient. Nevertheless, in serious chronic diseases as carcinoma and tuberculosis in the later stages, one does not expect vigorous contractions. It is a relatively common experience in primiparous labor to observe a cessation of uterine activity after a period of work. The pains become weaker and finally cease. The uterus is tired but not exhausted. After a rest of several hours the uterus reassumes its former activity and labor progresses to a spontaneous conclusion. These are known as secondary weak pains. In case of thinning of the lower uterine segment, infection or a rapid maternal pulse, the pains do not reach their former efficiency.

A still further consideration for the detection of disproportion, the prognosis of labor and the choice of methods for delivery consists of the mechanism of labor. The physician is acquainted with the Solayres obliquity in normal, the Roederer obliquity in generally contracted and the transverse and deflexed position in simple flat pelvis. In the severer types of flat pelvis—rachitic,—one finds the two asynclitic presentations more or less common. The anterior parietal bone presentation is more common and is of good prognostic import. The posterior parietal bone presentation—Litzmann obliquity—is to be feared as it is usually found in high grades of pelvic deformity. Here the anterior parietal bone rides above the os pubis and cannot enter the inlet. The fetal body lies close to the posterior abdominal wall. The gravity occasioned by this presentation before the membranes rupture is not as great. Generally, the rush of liquor amnii corrects the presentation or the patient may lean over anteriorly and establish an artificial pendulous abdomen. If the membranes have ruptured many hours previously and no correction, posture is useless. At this time it is still possible to change the position by the internal hand under anesthesia and bring the anterior parietal bone over the inlet. This procedure is desirable

in flat pelvis when both mother and child are in good condition and the dystochiai not too great.

A very interesting presentation consists of an extra-medial position of the head. The presenting part lies partly over the inlet and partly in the iliac fossa. These positions are seen in association with flat generally contracted pelvis. The mechanism is peculiar. The pains gradually force the head over the inlet, the occiput sinks down along the sacral concavity, rotates forward and the head is delivered spontaneously. Therefore, watchful expectancy.

A difficult mechanism consists in the occiput anterior positions or the entrance of the head in the true conjugate diameter. It is very unfavorable in flat pelvis. Engagement can only occur when the occiput sinks down strongly. If this does not occur and the time for version passed, a forcep delivery is necessary and this is very difficult.

One must remember that unusual mechanism may occur and it is our duty to see that the mechanism in progress is not incompatible with the safety of maternal and fetal life. Decidedly different mechanisms have been observed in successive labors in the same individual.

The presence or absence of moulding has much to do with the prognosis. Overlapping of the parietal bones and the formation of a caput indicate an effort to engage the head. Moulding is best recognized by pushing up the head with two fingers internally and then forcing it down externally; if the head meets resistance gradually, it is moulding and the outlook is good. If the head comes to a stop suddenly, no moulding is present.

During the course of labor we possess no reliable method of increasing the efficiency of the uterine contractions. The use of ergot for this purpose has long been abandoned. Quinine is occasionally used with indifferent results. The author personally never uses it. Recently, pituitrin has been introduced into obstetric practice and reports from its use at the present time are favorable. Only a larger experience will determine its place in obstetric therapeutics.

In the treatment of contracted pelvis, the medical attendant should remember that the great majority of women deliver spontaneously. Burger found 77.8 per cent and Scipiades 76 per cent of spontaneous deliveries in 5,288 and 6,877 labors respectively. Other large statistics show the same proportion. These results are of the greatest importance as they show the value of watchful expectancy.

During labor, the resistances are divided into those of the soft and those of the hard parts. The uterine powers are necessarily concerned with the resistances of the soft tissues in the first stage and one cannot expect these powers to overcome the bony dystochia at this time. With the advent of the second stage, the problem of pelvic resistance is un-

dertaken. The test of labor now begins; therefore, wait until some *positive* indication arises on the part of mother or child before undertaking delivery. The earlier we operate the more difficult is the delivery, the greater the laceration of soft parts and the more children are lost. Operate as late as possible consistent with the condition of mother and child.

As the membranes rupture early in contracted pelvis, delay the escape of the waters before the close of the first stage. Insert a Karl Braun colpeurynter into the vagina or raise the patient's hips with a number of pillows.

The treatment of contracted pelvis depends upon the grade of deformity:

First Grade: C. V. under 6 cm. in flat and 6.5 cm. in generally contracted pelvis.

(a) *Caesarean section.*—If the parents are desirous of having a living child or if the pregnancy is advanced too far for abortion, Caesarean section is necessary. It is the only operation. The patient should be instructed to come to a hospital several days before labor, should not be examined internally for a month before delivery and should be delivered abdominally after the labor pains have opened the cervix sufficient for drainage. If the patient is clean and in good condition, the results are excellent. If the woman is seen late or if she is infected, the Caesarean operation must still be performed and the uterus removed. The results are bad. These cases are the result of neglect. The extra-peritoneal Caesarean section is used for this latter class of cases—infection during labor—but the end results are still in stato quo.

(b) Abortion.—If the woman is seen early in pregnancy and a diagnosis of absolute contraction made, therapeutic abortion may be done if she refuses Caesarean section at term.

Second Grade: C. V. 6 to 8 cm. in flat and 6.5 to 8.5 cm. in generally contracted pelvis.

(a) Spontaneous delivery.—If the child is small and the uterine contractions strong, the patient should be given a chance for spontaneous delivery. If the head does not enter the inlet after the cervix has effaced and the membranes ruptured but rocks to and fro over the inlet, a Caesarean section is indicated. If the fetus is dead, perforation is the operation of choice. Perforation of the living child is fortunately becoming rare. It is called for only when the parents refuse Caesarean section and it is physically impossible to extract the fetus without crushing it.

(b) Caesarean section for the relative indication.—Where the conditions are favorable—patient in hospital, no infection, able to stand the laparotomy and a competent operator at hand, this method of de-

livery may be chosen. A growing indication occurs where the mother has lost several children in previous labors or is exhausted therefrom.

(c) Extra-peritoneal Caesarean section.—If the patient has been examined frequently and sepsis is probable, many German authors advise the extra-peritoneal route and report good results.

(d) Induction of premature labor.—This is an operation for the general practitioner. The time is from the 32d to the 35th week. The results are good for the mother but bad for the child.

THIRD GRADE: C. V. above 8 cm.

(a) Spontaneous deliver.—About 80 per cent of these labors terminate spontaneously and this is the method of election, therefore, watchful expectancy.

(b) Prophylactic version. By prophylactic version is meant a version done for a flat pelvis. The theory is that the head passes through the inlet better aftercoming than forecoming. This is undoubtedly true. Nevertheless in extracting the breech the head must pass the pelvic channel within eight minutes or the child is lost. In cephalic labors, the head can take hours in the passage. Again, if the soft parts are not well dilated, we must exert great traction on the head and often injure the child so that it dies and run the risk of serious laceration. Prophylactic version should only be done in multiparae with slight contraction and well dilated soft parts. If we wait for the test of labor after the membranes rupture, the time for version may be passed. If the operation is done earlier, it may not have been necessary. A clear indication for prophylactic version does not exist. It is incompatible with watchful expectancy. Version is contra-indicated in primiparae and in generally contracted pelvis. The field for this operation is rapidly diminishing.

(c) Forceps.—The forceps can supplant the test of labor. If the head has been moulded into the pelvis so that its greatest periphery has passed the level of the inlet, forceps are allowable and the indications for their use do not differ materially from those in the normal pelvis.

If the head is not engaged, the case is radically different. In order for the head to enter the flat inlet, the long diameter must increase and the biparietal shorten. Thus only can it engage. As the forceps must be placed over the occipito-frontal diameter, compression will not decrease the biparietal but, if anything, will lengthen it and so interfere with delivery. If delivery is effected it is only accomplished with severe compression of the skull, trauma to the brain, fissures, depressions and other injuries. Again, the symphysis may be fractured. Rupture of the uterus, vagina and perineum are not uncommon. The author very recently saw such a case. The C. V. measured 8.5 cm. The pelvis rachitic. The head was high above the inlet when the phy-

sician extracted. I found a complete uterine rupture, rupture of the vagina and perineum into the rectum. The fetal skull was fractured and a large cerebral hemorrhage snuffed out the child's life. The mother was saved by a timely hysterectomy.

The forceps should never be placed on the *unmoulded* head riding above the inlet. The forcep is not a cranioclast. If the head is moulded, the forceps may be used (a) when danger to mother or child is present and (b) when uterine activity has ceased and the length of labor or infection of the mother make it probable that the pains will not return. Long continued local pressure causes gangrene and fistulae and should be prevented.

Karl Braun, many years ago, advised us to make eight strong tractions and if they failed to remove the blades and perforate.

The problem of pelvic deformity is a protean one and challenges the art and skill of the most expert but by studying the cases that come under our observation and following out the recognized rules of procedure, we will discharge our duty to our patient and relieve her in her hour or need.

TYPHOID SERUM APPLICATIONS.

Drs. Kent Nelson and W. E. Hall, of the United States Army Medical Corps, San Antonio, Texas (*Journal A. M. A.*, November 25), describe the methods of antityphoid inoculation used by them in the Eighteenth United States Infantry Regiment. Thirty-five hundred separate inoculations were made, and the methods employed against infection and to equalize the reaction by uniform and accurate doses in the rapid manner required are given in detail. Two hypodermic syringes and six separate needles were used, the needles being sterilized after each inoculation. There was not in the whole number a single case in which the temperature rose to 102 and there was no suspicion of infection or ill effect which could be attributed to the vaccine. Care must be taken to give the vaccine subcutaneously and not intravenously. In the one case in which this latter occurred the reaction lasted three days, though the local reaction did not appear. In the 12,000 men in the encampment at San Antonio there was but one case of typhoid fever, and that was in a civilian teamster who had never been inoculated against typhoid.

CYSTOSCOPY AS AN AID TO DIAGNOSIS.*

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The great constructive minds of the present day are ever alert, and each year chronicles some new discovery, which enables us to place medicine on a more nearly scientific basis.

As a means toward an end, cystoscopy has played no small part. To Prof. M. Nitze must be given the honor of constructing the first instrument of any value for the examination of the interior of the bladder, and all instruments since that time have been modifications of his original ideas.

Both German and American surgeons contributing to the list of useless instruments manufactured.

Cystoscopy then fell into great disrepute, many very competent surgeons denouncing it as of no value.

About the year 1900 Dr. Hugh H. Young, of Baltimore, M. D., devised and published certain fixed rules in conducting a cystoscopic examination which, when carried out, give a beautiful picture of anatomic construction. He and other G. U. surgeons also advised the abandonment of all except indirect cystoscopes, the picture then being transposed when reproduced on paper.

To Diagnose Prostatic Hypertrophy.

In hypertrophy of the prostate the beginning of the urethral canal is the most important structure to examine; this being nearly completely surrounded by the prostate termed the prostatic orifice.

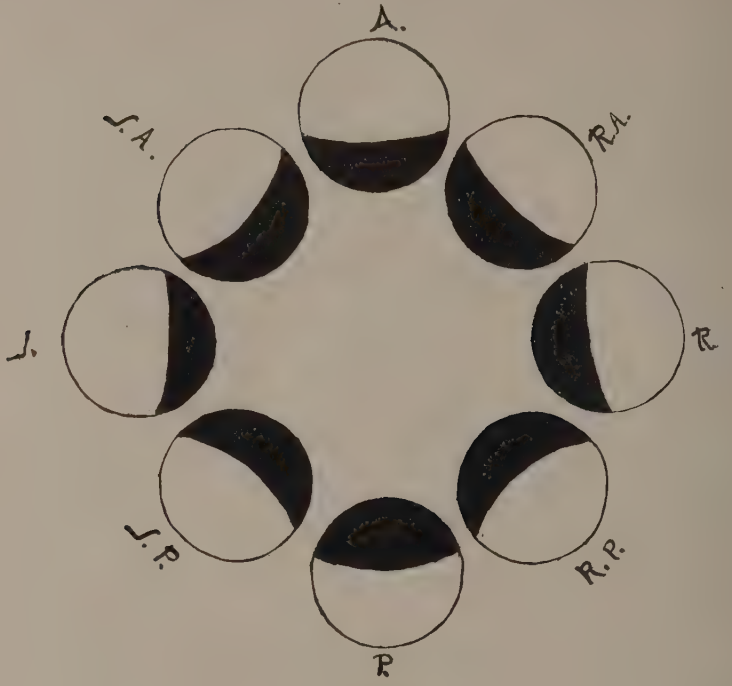
Knowing the normal anatomic construction of the prostatic urethra to be shaped like a circle flattened on its base, he constructed a series of circles to record the shape of each prostatic orifice examined.

At first he used four circles, then six, then eight, as recording more nearly perfectly the idea he wished to portray. He arranged these about a center which represents the shaft of the instrument in the urethra.

You can readily see by transposing the image, the picture you would obtain.

In prostatic enlargement this picture would be modified according to the lobe or lobes effected and the thickness of the vesico-urethral mucosa. These various deviations I will not try to portray as they would be tedious and not interesting to you. Suffice it to say that one or both enlarged lateral lobes existing alone or in conjunction with a median, may be diagnosed with the aid of the cystoscope.

*Read before the Polk County Medical Society, June meeting 1911.



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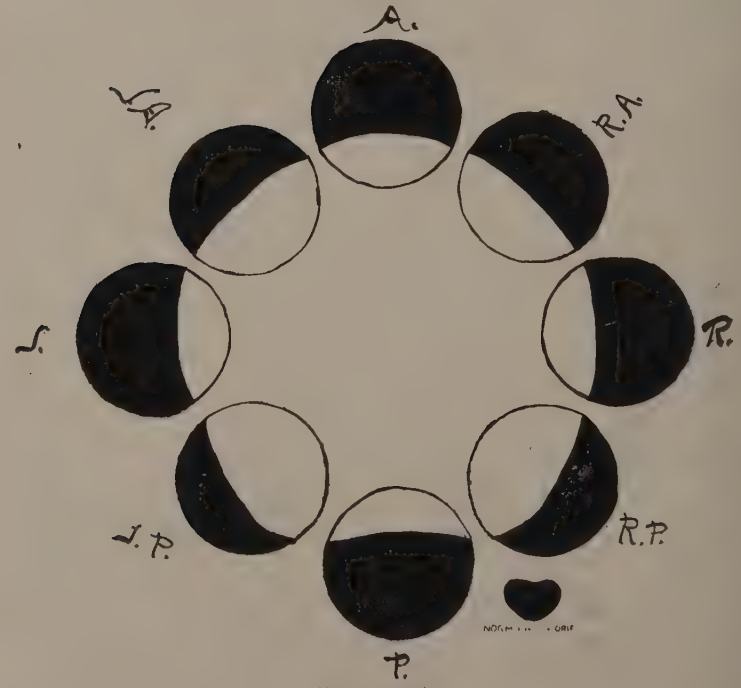

TRANSPOSED

Having now recorded the findings at the prostatic orifice it is well to view the bladder wall, and much may be gained by its careful examination.

1. As to the existence of a cystitis now, or at former time, and as to its acute or chronic condition.

2. To the existence of Trabeculae, these being especially associated with enlarged prostates, being due to compensatory muscular hypertrophy of the bladder wall, resisting or trying to resist the mechanical obstruction.

3. As to the presence of stone, tumors, or other foreign bodies, which will be mentioned later.

4. As to the existence of ulcers or the presence of a perfectly normal mucosa.

To Diagnose T. B. Vesical and Renal.

The presence of various ulcers in the bladder should be regarded with suspcion, the tubercular variety usually being associated with some primary tubercular process in some other part of the body, quite often of one or both lungs, or one or both kidneys, the ulcers quite often surrounding the ureteral orifice of the affected kidney.

Catheterization of the suspected kidney with demonstration of the T. B. is proof positive.

As to Diverticula.

You may also diagnose the presence of diverticula, whose orifices may be very small or large enough to admit the human finger. When these openings are large the shaft of the cystoscope may be introduced into them and their wall examined; when the openings are small ureteral catheters may be introduced into them and an idea as to their depth thus obtained, some of them having a capacity as great as, if not greater, than that of the bladder.

They are sometimes responsible for the continuation of cases of cystitis, which had previously shown a tendency to clear up, with now and then an acute exacerbation.

It is sometimes difficult to diagnose these from bladder tumors, but if watched carefully cystoscopic fluid running in and out of their orifices brings flags of pus, or so-called cystitis flakes, and the diagnosis is complete.

To Diagnose the Presence of Stone.

The greatest field of the cystoscope is the diagnosis of vesical calculae.

Not only may their size, number and location be determined, but often their composition; in that way one is often guided as to advice given the patient, i. e. as to whether he should have the stone or stones

crushed or whether he should have supra pubic cystotomy performed.

The finding of a stone often clears up cases with obscure diagnosis, especially when encysted in the bladder wall and in that way masking the symptoms.

To Diagnose Vesical Tumors.

Almost every known form of tumor has been found in the urinary bladder, and it is more from their location than from their classification that they become interesting. The chief among which I will mention but briefly; namely, Papilloma, Myxoma, Myoma, Sarcoma, and Carcinoma.

Of the non-malignant type Papilloma easily holds first rank, being the only vesical tumor which can be cured, and the border line is so close at times between the simple and the malignant forms of tumors that they are classified by some authors as semi-malignant.

Their location is usually at or near the trigone and for that reason they are easier of access and more readily removable.

Of the malignant variety Sarcoma and Carcinoma are the only ones necessary to give serious consideration, and usually at the time when a diagnosis is sought the case is inoperable. In a general way it may be said that Sarcoma is found more frequently in the young while Carcinoma attacks adults.

After the diagnosis is thoroughly established the indications should be toward relieving suffering and the establishing of supra pubic drainage, where found necessary.

To Diagnose Foreign Bodies.

Almost every known substance from a long hair to pins, hairpins, tooth brush handles, etc., may be found in the human bladder; when suspected, an examination with the cystoscope will clear up the diagnosis.

Retention of Urine Due to Spinal Disease.

Quite often, as the result of specific growths, some physical injury, some acute pyogenic disease, the nerves supplying the bladder are partially paralyzed and the individual is unable to void the urine.

This often forewarns the approach of Locomotor Ataxia. In the great majority of these cases there is nothing to be done.

The diagnosis is made often by the immensely dilated internal splenicter. They either get incontinence from over distention of the bladder or are often infected with catheters and soon die on account of the low resistance.

To Diagnose Renal Functional Capacity.

Much has been done of late since the use of the silver colloidal preparations in the injection of renal pelves, then taking an X-Ray pic-

ture of the same, thus denoting the size of the pelvis and as to whether there are large cavities in the kidney substance.

A system called chromo cystoscopy is very important; i. e., the injection hypodermatically into the muscles of certain aniline dyes, preferably indigo-carmine, then watching for the color to appear in the urine. As soon as it appears the cystoscope is introduced and each little jet counted as it spurts the colored fluid into the bladder.

The workings of each kidney may thus be timed and its functional activity established.

The use of the ureteral catheters may also establish the working power of each or both kidneys and is of more value from a diagnostic standpoint, as the microscope will reveal the true state of affairs.

Conclusions.

1. Cystoscopy is of material aid in diagnosis.
2. Its use before operative procedures should be more general.
3. It requires not only skill of manipulation but experience to reach valuable conclusions.
4. It has opened a great field for valuable work, especially along the lines of various forms of nephritis.
5. It simplifies and renders renal surgery more exact.

Report of Cases.

Case No. 1.

F. A., male, aged 45, farmer, called at my office on October 22, 1910, complaining of blood in the urine, which had been noticeable for over a year. He had been treated a great deal but had received no material benefit.

He was put upon the table at that time but on account of a very bloody field no diagnosis could be made. One week later he was again put on the table and a diagnosis of vesical papilloma made. A drawing of the same was secured and he was advised to have the growth snipped off. He did not heed the advise at that time but went to California, where he has remained until recently, when he returned and is now ready to have the work done. I am very sorry that I have no microscopic sections of this to show.

Case No. 2.

F. W., male, aged 34, married, called at my office in April, 1910. His family history was of no importance, and his past history showed nothing of particular value except Tripper at 19.

His present illness first became noticeable, a matter of six months before, with slowness of urination.

He was placed on the table and was found to have a stricture of a fairly large caliber in the membranous urethra and also chronic prostatitis and was advised to return for treatment.

On his return the structure was dilated and the prostatitis treated until one month later, when he was cystoscoped and three small stones were found in the bladder. These were crushed and washed out and no stones have been formed since as he was cystoscoped on November 20, 1911.

Case No. 3.

I. M., aged 70, male, farmer, called at my office on August 20, 1910. His family history and past history were negative with the exception that one lobe of the prostate had been removed some six years before. His present illness began five months prior to this time with some blood in the urine but no pain on urination and continued sometimes better, sometimes worse.

The physical examination showed the wound of the previous operation and one lobe of the prostate still present. He was then put upon the table and a sound passed and a stone detected. In order to further the diagnosis, he was cystoscoped and a drawing made. On August 29, 1910, he was put on the table and a supra-pubic cystotomy performed. One large vesical calculus was removed and the patient had an uneventful recovery.

He called at my office on December 21, 1911 and I find no trouble at present.

Case No. 4.

W. W., aged 64, retired farmer, male, was referred to me on account of frequent, painful urinations, accompanied by a passage of blood. His family history was not important and his past history was negative. The present illness began only six months before, although he had found it necessary to get up at night for two or three years.

On September 10, 1910, he was put on the table and a cystotomy attempted without results on account of the field being too bloody. On September 11, he returned and a large mass was found attached to the left lobe of the prostate. Diagnosis: Cancer of the left lobe of the prostate (inoperable).

Taking into consideration the fact that he could not void, supra-pubic cystotomy was performed for drainage.

He died four months later but no post-mortem was made.

Case No. 5.

B. P., aged 33, policeman, male, called on October 12, 1910. His family history was negative and his past history showed Tripper at twenty-four and twenty-five of only a short duration with very good recovery. Good habits. The present illness began on December 9, 1909 with very severe pain in the left kidney and was diagnosed as stone at that time. He had kept up the treatment since but received no good results.

His physical examination, when put on the table, showed a bladder capacity of four ounces and much pain on distention. The urine was cloudy and when examined, T. B. was found.

On being cystoscoped one week later, T. B. ulcers were found about the opening of the left ureter. Both kidneys were catheterized and the right was found to be healthy while the secretions of the left abounded in T. B.

He was then sent to an internist for a thorough examination and both lungs were found to be involved. He was put upon diet and tubercular treatment and although he is still alive there is no improvement and in fact he seems to be slowly loosing ground and the ultimate end is inevitable.

Case No. 6.

Mrs. B., aged 27, married, two children, came with her physician to my office for diagnosis. The family history was negative and her past history was the same (always nervous). Her present illness began

over one year prior to this time by having severe pains in the left side and was often semi-conscious. Morphine, chloroform, etc., did not relieve her, only helped and the pains seemed to increase in frequency.

On being cystoscoped the bladder showed normal. The ureters were then catheterized and the left showed a very peculiar distended appearance and the catheter could not be introduced but a short distance within its lumen, while urine oozed from its orifice.

A diagnosis of stone partially blocking the ureter was made and later confirmed at the operation which was performed by one of the Des Moines surgeons.

Case No. 7.

D. H., aged 48, Irish, male, miner by occupation. His family history was negative, but his past history showed some trouble with the urine for from eight to ten months duration, with the bladder very painful and catheterization necessary most of the time. His present illness was of eight to ten months duration and seemed to have no definite, sudden onset.

When put on the table, his physical examination showed residual urine to the amount of 250 c. c., but not much blood, although there was large quantities of pus. The case was diagnosed as Ulcerative Prostatitis. After four days he was put upon the table and when an incision was made, a carcinomatous mass was felt, so, perineal drainage was established as the case was inoperable. Much of the bladder surrounding being infiltrated, especially the orifice.

He died in eight days, apparently from uremia, but I am satisfied that it was more from his low resistance than any other cause. Due, in a great measure to repeated hemorrhages, from which he suffered from time to time.

Case No. 8.

B. W., aged 22, male, single, came to my office on November 14, 1909, complaining of intense pain on urination which was very spasmodic in character. His family history was negative and his past history also, with the exception of Tripper two years before with prostatic trouble. The present illness began two months before I saw him, with very frequent urination with much blood at times.

His physical examination showed normal urethra, but the bladder was filled with difficulty and the fluid was very bloody. When a clear area was obtainable, a stone about the size of a hickory nut was seen to protrude from a diverticula near the left urethral opening.

Operative treatment was advised but he removed to another state and the subsequent history is unknown.

HELPED.

Mrs. Willis has been very watchful of her husband's diet lately, and is in constant fear lest he overeat.

"John," she asked anxiously one morning when Willis had been telling her about the banquet which he had attended the night before, "how many helpings did you have last night?"

"Two," answered Willis absently; "one at the banquet and one on the way home."

January Lippincott's.

WHO IS TO BLAME.*

J. H. GOAD, M. D., ELLSTON, IOWA.

No condition ever has or ever will exist without a cause, and on this proposition I wish to briefly discuss who is to blame for many unfavorable conditions that touch your life and mine and that takes most of the easy money from our business, (and let me suggest here that there is but little easy money in the practice of medicine), while the bulk of our work is small pay, much effort and multiple responsibility; yet, there are many avenues of good pay, pleasant work and reasonable responsibility. The avenues to which I refer are the ones that feed the quacks, the advertising specialist (?), the spectacle vender and every other form of irregulars.

Now as to the spectacle vender who is to blame for their existence? with one voice you all answer, our State Legislature, because they license them and make their graft legal. Well assuming the fault is there I wish to ask if this body of men have ever either as a body or separately, discussed the matter with our representative or senator for different legislation. If not where is the fault? Or gentlemen, do we meet from month to month and exchange ideas and words of encouragement to one another and jointly petition our law making assembly for redress of our grievance as profession brethren should? You all know we do not. We fight the irregular with a broom stick and stand ready to turn our gatlin gun on a competing M. D. This is what saps our profession of its vitality and dignity.

Now allow me to attack the M. D. once more. How many of you can and will take one of your patients into your office and intelligently prescribe and fit a pair of glasses? Then allow me to ask you who is or who should be more capable of doing the work than an M. D.? Well we know that people need to and are going to wear glasses, then who shall fit them? In other words gentlemen, if you are willing to sit and whittle on a dry goods box and listen to vulgar stories while some spectacle vender attends to your business, you and you alone are to blame. You have not only deprived yourself of a fee but you have lowered the standard of the profession. When by your neglect you turn your patient to an unprincipled, ignorant spectacle vender, whose only specialty is humbug and whose long suit is the gift of gab. I say by your indifference you lead your patients to believe that he knows more about eyes than you do; and at the same time if a competing M. D. gets an obstetrical case or even an office consultation from your regular patients, well—it simply breaks your heart.

Again gentlemen let me ask you what is the excuse for the markets

*Read before Ringgold County Medical Society, September meeting.

being flooded with so many kinds of hand lotions, face creams and other toliet articles of various brands and unknown quality. Did it ever occur to you that chapped hands is a physical ailment and worthy of your prescription? If you are a dispensing Dr. (as we all should be), there is just as good a fee in a six or eight oz. hand lotion as in many other things we dispense. Now I expect to provoke a smile when I mention a corn cure and I expect you to say "Thank God I am not a corn Dr." but I say Thank God for salicylic acid and collodion. Now gentlemen it is not so much the 50 cents I get for a two oz. vial of corn medicine or the one dollar I get for the hand lotion but the fact that I try to impress my patients with the idea that I am the doctor and I try to teach them to consult the M. D. and not the pharmacist for all physical ailments.

Now while on the subject of skin allow me to mention the numerous cancer specialists? cancer hospitals etc.' And though I call them quacks yet I must confess they work on a sound therapeutic principle. Now this class of irregulars or advertisers take a nice lot of easy money from your territory every year, and you can do the work just as well as they can and the prognosis is favorable and the fee is good. Well you say I don't know anything about cancer. If not why not? We all have access to the field of medical literature and if we don't investigate it is because we are too trifling. I do not advocate the general practitioner doing any and all kinds of surgery, but there is a class that we can do in our office or in the patients home, and again it is the class of surgery that feeds the advertiser—ruptures, varicoseles and hemorrhoids. You have all seen the picture in the daily papers where the man with the vandyke beard and clinched fist saying, "I positively cure rupture." If we would properly advise our patients and operate them at home we could do much to correct the condition. We could call in a colleague and relieve the patient of his suffering and save him from the hands of the quack who robs him of whatever sum he possesses. As to hemorrhoids and varicosele I would advocate the same.

Now gentlemen from my brief discussion you can readily see where I place the blame for a large amount of the work done by the prescribing druggist and the irregulars, and as I have only touched upon a few points with only the hope of bringing out discussion, and let me say in conclusion that my plea is for the regular medical profession to concentrate their efforts against the common foe, (the irregulars). Stand by the M. D. first, last and always. Work our field to the limit. Educate our patients to consult us for every bodily ailment. Organize, harmonize and concentrate our energies, and by persistent effort and constant hammering at every possible avenue of attack may we raise the standard of our profession to the plain on which it belongs by eliminating ignorant unprincipled intruders. In other words be a live wire, and remember there is no use to have a good aim in life, if you don't pull the trigger.

DIVISION OF RESPONSIBILITY IN REFERRED CASES.*

J. W. KIME, M. D., FORT DODGE, IOWA.

GENTLEMEN OF THE WEBSTER COUNTY MEDICAL SOCIETY:

The discussion I present tonight is brought before you after having visited every county medical society in the state at least twice, and many of them three times, during the past three years, and after thoroughly familiarizing myself with what the medical profession is doing in every county in Iowa.

There has been a great deal of discussion both lay and medical, recently, concerning the division of fees between physicians and surgeons and other specialists, and this discussion will continue until a uniform system has been adopted which meets the requirements of the medical practice of today.

Medicine is undergoing rapid changes both in methods and in practice. We cannot, therefore, expect the rules which have governed our relations in all matters in the past to be equally applicable today. And they are not. Medicine, today, is a business and must be conducted along business lines. The great number of doctors and the overcrowding of the profession compel the most rigid economy and strict attention to business details if one would succeed in remaining in his profession. Refuse to act in accordance with these facts and note how soon the rent falls behind, the tailor's bill remains unpaid and the family of the doctor suffers for ordinary comforts of life. Deny it as we may, talk altruism as we sometimes do, yet in the end, we have to deal with grocer, and butcher, and clothier and landlord just as the grosser forms of men, who make no pretense toward altruism, must do. There is a great deal of sickly sentimentalism and cant and false pretense about the practice of medicine which has nothing to do with the real work of the medical man.

It is true that every doctor responds with cheerfulness to those tragedies of life with which we come in so frequent contact, but these are the common acts of humanity to which all respond under like conditions, and are not peculiar to our profession alone. A man is a man wherever found. It is coming to be accepted to be true that a good doctor is a reasonably good business man. Indeed, he must be in order to keep himself sufficiently equipped for the work he must do. His expenses are enormous if his business be large, and if he be properly prepared to do his work and keep abreast of the times. He must visit the centers of medical knowledge at least once each year or he will soon find that he is dropping behind and his patients are not having the best that the times afford. The penalty paid is in loss of life among those whom he treats.

*Published by request of the Webster County Medical Society.

Medicine, I repeat, is a business whose capital stock is knowledge and learning and skill which can be acquired only by those who keep close to the lines of modern business principles.

A few days ago I visited with one of the leading lawyers of the city. In speaking of his success I found that he measured it in the dollars brought in during the year. I find that the success of our own men is measured by the same scale, and I do not decry the measure.

Just why any claim should be made to anything else, just why anyone should expect any other measure for the medical profession than that which applies to all lines of modern business, I do not know. I do deny, however, that any other scale exists. Cant, hypocrisy, deceit and lying, do not in any manner affect this belief. Neither does a sense of honor, justice and uprightness cause me to regret that things are not different in our profession from what they are in other kindred lines pursued by men just as able, just as humane, as we. We are no better and no worse than other men with equal ability to our own in other lines of work. We are men; and this should be the highest sentiment to which we should aspire. Let us be men.

Medicine being a business, will be pursued along the lines of modern business methods, and these methods will be followed in city and in rural towns alike. Indeed, some of the best business men of the state are found in the smaller towns. The specialists of note in our profession are, as a rule, to be found in the larger cities only.

The city specialists has been too prone to assume that the man in the smaller towns has little ability—or he would not be there. I see no more reason for this assumption in medicine than in other lines of business. Larrabee and Carroll were both from small towns. Shaw and Wilson were from rural towns of the state. Hammill of Hancock and Allen of Pocahontas, Smith of Mitchell and Mattes of Sac rank among the leading lights of modern politics in our state. They are likewise successful in the lines of business which they pursue. They are all from rural towns.

We must expect the same business capacity and ability among the medical men in the smaller towns that we find in other walks of life in these same places. The local doctor is, therefore, going to look after his own business in a business way. He is not merely a sign board pointing the way his patients should take to other practitioners of the healing art. He is not merely a finder and distributor of cases to those who are connected with hospital service. If you take him to be that kind of a business man you do not know the country doctor. If you take him to be an altruist who looks after all the world, except his own, you do not know him. He is an altruist who wisely assumes that

altruism begins at home, with his own wife and the little ones rocked in his own cradle.

The country doctor breathes pure air and plenty of it; he eats an abundance of good pure food; he drinks pure water; he is a clean man, his head is clear, and he thinks in a straight line. You can't fool him. You must deal with him on the square or you will be omitted from the deal.

It has been the custom to assume that the family physician parted company with his patient when referred to the specialist; that his interest and responsibility there ceased. Often, the scantest courtesy has repaid the home physician for the service rendered in referring the case. The time has passed, and will not return, when such practice will be regarded. The family physician's responsibility, and his interests, do not terminate when the patient is placed in the hospital and the surgeon, or other specialists, is called in to do some sort of repairative work on some portion of his body. The responsibility of the specialist is small in comparison with that of the man who referred the patient. When the home doctor refers a case to me he assumes a great responsibility. He recommends me and recommends what I shall do. His own reputation is at stake. He is supported or condemned by my management of the case. If I fail he suffers far more than I. My field is the state, his a small portion of the county. If I fail with his patient, only a microscopic point from which I draw my work is affected. His entire field lies just where the patient lives. If death results, I hear little from it, but the family physician must pass the little mound each day in the year.

I now recall a case in point. Several years ago I referred a case to an eminent surgeon in Chicago. The operation failed of success. The patient cursed me to his dying day, yet I had chosen a surgeon whose name is known the world around. The surgeon pocketed a good sized fee and suffered nothing from his failure; I got nothing, and untold criticism. I deny, and the 100,000 general practitioners of medicine throughout the country deny, that the family physician's responsibility ceases when the patient is referred to another.

The responsibility being divided, and the family physician assuming a large share, if not the greater portion of the responsibility, rightly claims the recognition due him in the management of the case while temporarily in the hands of those to whom he has recommended him. The country doctor recognizes these conditions and he is governing himself accordingly.

Nor can we dismiss the subject by a waive of the hand and majestically sit back and announce that the patient is ours, and the responsibility rests on us alone. We will do this but once with any physician who is up to date.

Practically every surgeon in the state has some arrangement whereby he "makes it right" with the family physician. There may be open division of the fee; there may be an assistant's fee; there may be an anaesthetist's fee of round proportions; there may be a fee for coming with the patient; there may be division of the fee if the patient so understands it. In some way or another the conditions are usually being met. Now why not meet them openly, as men, and not resort to subterfuge of any kind?

In some portions of the state this appears to have been done and the men have had the principle to stand by and defend what they have done. They have done right, and they have done what they will be compelled to do if they stay in business. Declining so to do, their patients will go to other places where the family physician will be recognized. There is no getting around the issue, it must be plainly met. The family physician demands it, he is right, and he is going to have what he wants. Denying the facts, covering up the transaction, only creates a scandal when the cloak of secrecy is lifted and the scandal is aired.

The only scandal, and the only wrong doing, is in the attempt at secrecy and in denying the truth of the matter. The whole question is now in a disgraceful state of unsettlement, and laymen who have not the merest smattering of the conditions are creating a terrific furor about it.

The profession must settle this question promptly, openly, fairly and honorably to all—to patient, physician and specialist.

This can be done only by a just and equitable adjustment of every claim of all who are parties to the transaction. There are certain points upon which we should have no difficulty in coming to an agreement:

1. The family physician has the case in his own hands; the patient depends wholly upon him for wise and safe counsel in his hour of distress.

2. The doctor knows and feels his responsibility in the case and he is going to place his patient where this responsibility is recognized.

3. He has his choice among a number of surgeons or specialists, any of whom will do equally good work. He will naturally turn to the man who recognizes the home physician's responsibility in the case.

4. We may put it down as certain that the family physician is not going to part company with his case. It would be bad business to do so and he will not do it.

5. The specialist, or hospital, which does not meet the requirements of the family physician will soon find himself beached for the family physician is master of the situation and he will so govern himself.

Now these are the facts and they cannot be questioned. What are

we going to do about it? Are we going to expel all the general practitioners, and a large proportion of our specialists, as unworthy of association with us? We may do so, but we will soon find that while we are perfectly spotless we will also have plenty of time to take care of our spotlessness. We will flock alone, and soon flock out into other callings.

The patient must be treated fairly; the home physician must be treated fairly; the specialist must be treated fairly. The patient must not be robbed, he must not be held up, he must be charged only a reasonable fee for the work to be done. This fee must be paid to physician and surgeon in proportion to their responsibility in the case. Just how much the surgeon receives and how much the family physician, is a matter of no concern to the patient so long as the work costs him no more, whether the fee goes to one or to two men.

Say it is an appendectomy which costs the patient $150 in all. This is a very reasonable charge to the man in ordinary circumstances. What can it concern the patient where the money goes if he does not pay too much for the work? It does not concern him and all the cry about robbery fraud, and charlatanry, is the purest buncombe.

The maxium charge for each procedure, whether surgical or medical, should be reasonably fixed for persons in fair circumstances of life; and these charges should be scaled all the way down to nothing, for every surgeon and every physician must give of his time and his ability to the unfortunate and the poor.

I support the belief that the family physician and surgeon or other specialist should share the responsibility, the skill and management of referred cases, and that an equitable arrangement should be made between them as to compensation which should depend in each case upon the responsibility shared by each.

I append the comments of President Voldeng in his annual address before the Iowa State Medical Society, at Des Moines in May, 1911. The address may be found in the Journal of the Iowa Medical Society for July, 1911. On page 11 he says:

"From inquiries within and without the state it is quite evident that the practice referred to as the "Commission evil" is on the increase. Discussion in regard to it is no longer confined to members of the medical profession, but the subject is now being discussed by the press and the laity.

From information I have been able to gather, I conclude that an alleged unfair and unjust difference in the fees received by the specialist and the general practitioner is to a large extent responsible for the so-called 'Commission evil.' While the practice which is alleged is pursued by the profession today, is to say the least, deplorable. I am

charitable enough to believe that the originators had in mind the cultivation of encouragement of co-operation rather than competition. If so, I think we must all admit the effort has been a failure. Co-operation, however, should be encouraged rather than competition. If, as is claimed by many, the division of the fee has come to stay, the practice should be made uniform, divested of all secrecy with reference to both patient and physician, and the entire transaction made honorable, respectable and above all, just to all concerned. I am aware that the regulation of the conduct of the individual members of this society lies with their respective component societies and not with out-state or national organization."

The above paper was read before the Webster County Medical Society on November 28, 1911, and was referred to a special committee which reported to the society on December 12, as follows:

"Your committee to whom was referred the paper of Dr. Kime on matter of fee division beg leave to report, and recommend the endorsement of the sentiments expressed in his paper.

The medical profession of Webster County can speak its mind freely upon this subject without having its motives questioned, for its members have been entirely free from the habit of fee-spliting. We cannot too severely condemn the physician who peddles his cases about and turns thm over to the highest bidder; and the specialist who attempts to get business by giving or offering to give to the family physician more than his services are fairly worth, is to be severely condemned. We recognize the fact that commission giving, or fee division by various methods, has become a common practice in the medical profession, and we believe this subject should be taken up and fully, and openly discussed and fairly settled in the councils of our profession.

Therefore, Be It Resolved, That it is the sense of the Webster County Medical Society that some system of division of fees be adopted and generally followed, which shall be without secrecy and be fair and just to the patient, family physician, and operating surgeon or specialist. That we believe a spirit of fairness requires that the family physician and operating surgeon should be paid according to responsibilities which each assumes and bears in referred cases, but that the patient should always know that this arrangement exists.

That we recognize the fact that some method of fee-splitting has become a custom, and we believe the principle involved is true and honorable if rightly applied and the general public be fully taken into our confidence.

That we deplore the fact that, heretofore, secrecy has been the rule in this matter, and that sometimes doctors of low ideals have not sought to labor for the patients' best interests.

That we believe the maximum fee collected should be a reasonable one, and that in no case should it cause the patient undue hardship in its payment.

That we hereby deny the charge now so loudly made by the enemies of our profession that graft, extortion, or methods of the charlatan, are practiced by the great body of medical men.

Report unanimously adopted.

W. R. Bates,
J .M. Garrett,
C. J. Saunders.
Committee.

DIVISION OF FEES.

From the Viewpoint of A Layman.

F. D. T., DES MOINES, IOWA.

"The division of fees for medical services rendered" has been agitating the profession for some time. There has been arguments advanced both in defence of the practice and condemning it and although there is much to be said on both sides of the question it seems that the practice, as it is now carried on, is deplorable, both from an ethical standpoint and from a humanitarian point of view.

As has been put forth in resolutions introduced in various medical societies all over the country, the practice of "fee splitting" is one to be condemned as worse than any other violation of medical ethics. For as it is now practiced, it is a mere barter in human life; the patient being sold, practically, to the highest bidding specialist or surgeon. Every surgeon of good repute has received hundreds of letters from other physicians, who were not as conscientious in their views, asking what per cent of the fee would be allowed them in case they should send a patient for treatment. Also there are scores of physicians in general practice that have received communications from specialists in certain lines, offering a per cent of their fee to the general practitioner for all cases referred to them.

It should be emphasized, more strongly than human words can convey, that such dealings are not to be tolerated by an intelligent, reasoning public, for the reason that in the practice above mentioned the patient is virtually sold without his knowledge. Even in the days of slavery, when human beings were bought and sold, it was with their cognizance, even though they were unable to prevent it.

Many surgeons and specialists hold up their hands in horror at the mere mention of "fee splitting" but will agree to allow the attending physician a certain portion of the operating fee for assistance in the

operation. What assistance can the average physician give the operator when it is a recognized fact that in the administration of anaesthetics, an experienced, competent anaesthetist should always be employed, in order to avoid the serious after-effects of the anaesthetic as well as to insure perfect anaesthesia during the operation? How many of the general practitioners are experienced anaesthetists? And again, how can the attending physician assist the operator in his work when he is not familiar with the nature of the operation itself? And is it not true, also, that the nurse, who has had practical experience and special training along exactly such lines, should be more competent to care for the operator's wants than the physician who accompanies the patient? Yet, every day, there are fees divided for such nominal assistance and, in the majority of cases, without the patients full knowledge.

On the other hand, who assumes the responsibility of the case prior to the treatment by a specialist? Who has the care of the patient during and after convalescence?—The family physician.—His reputation as a family advisor is at stake and even though he may be able to place the blame for an unsuccessful operation upon the operator, still, it is the home doctor who must meet the friends and relatives of his former patient, from day to day and even though their dissatisfaction may not be expressed, there is a certain reticence in committing themselves to this particular physician's care, and he stands to lose a certain amount of patronage. As the practice of medicine is his means of livelihood, should he be asked to assume this condition of affairs absolutely without additional remuneration?—No.—How then is this to be remedied? By the selling of his patients to the highest bidder and by dealing in underhand methods? Or by an honest, open and straightforward understanding between the patient and the atending physician?

As has been said, "Let the laity be thoroughly informed of this deplorable practice of "fee splitting" and the custom will soon be broken up: * * * The public will soon learn of the specialist who is in disrepute with his own society." The members of the various medical societies should take it upon themselves to uphold the high ideals that the medical colleges have sought to instill in their minds and such members as refuse to recognize the claims of justice to their fellow-men should be ostracized and full publicity given to their actions.

The laity, as a whole, does not concern itself where its money goes as long as it receives benefit and the charge is not exhorbitant, but it does and will object strongly to the commercialization of its misfortunes by unscrupulous physicians.

Nothing is as conducive to skepticism as misplaced confidence in the physician who has had charge of the family ailments for years. Nothing is as detrimental to the confidence of the newly acquired pa-

tient as the knowledge that the physician to whom he has entrusted his life, has and is making a practice of referring cases to the highest bidding specialist, regardless of his qualifications for treating the specific case.

The laity is becoming more thoroughly informed in regard to conditions in the medical profession, thanks to the hypocrisy and contention, and unless matters are mended, will, in the future ,make its own selection of the specialists with whom it wishes to treat, and avoid being imposed upon, finacially, in order to meet the demands of unscrupulous physicians and surgeons.

Let every atending physician, conscientiously, choose the specialist who can best treat the case at hand, without reference to financial remuneration, and have a thorough understading with the patient as to what this specialist is to receive for the operation and as to what the attending physician's fee will be for services before and after. Let every specialist strive in every way to make his services so valuable that he will not be compelled to resort to traffic in human life, but will be able to charge a nominal fee for the services rendered and in this way the general practitioner and the surgeon, by showing justice to their fellow men, may help to uphold the high standard of the medical profession and not trail it in the dust of corruption.

At the conclusion of an operation in which iodine has been used to disinfect the skin field, remove the excess of the drug by wiping with alcohol or ether. This may save the patient much discomfort.

American Journal of Surgery.

HARD WORK.

Scadds (proudly pointing to his new palatial mansion): "There it is. And you must remember I got it all by hard work."

Shadds: "Hard work?"

Scadds: "Very hard."

Shadds: "Who did it?"

January Lippincott's.

IOWA MEDICAL JOURNAL

A Monthly Journal
Devoted to the Interests of the Iowa Profession

E. E. DORR, M. D. Editor and Proprietor.

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OUR PLATFORM.

The Improvement of the Health of Iowa People.
The Improvement in Hygienic Conditions in all Iowa Cities.
The Improvement of the Profession, Individually and Collectively, in the Art and Science of Medicine.
The Improvement in Legislation so as to require High Attainments of every Practician, regardless of his School or Pathy.
The Improvement in Organization, making every legally Registered Physician of Good Standing in his Community a Member of his County and State Society.

Vol. XVIII Des Moines, January 15, 1912 No. 7

"Who Is to Blame?"

This subject is handled in this issue by Dr. J. H. Goad and deserves consideration by every member of the profession in Iowa. He places the blame for the spectacal vendor upon the physician, insisting that it is due to pure laziness on their part that they are not fully posted to do the work that the vendor does. The quack reaps the reward he does through the lack of interest the physician takes in his patient.

Think this over and study the problem of whether or not it will pay to take a month or six weeks off each year to keep posted on those branches of our work that the quack is now reaping his harvest in.

The Missouri Valley Meeting.

It is unusual for so large a society to leave the large cities of its district and hold a meeting in a small town as they are doing this year when they meet in Colfax in March.

It behooves every medical man in Central Iowa to make an effort to attend. The program will be up to standard in every respect and every man who attends will be repaid for the effort.

The Registered Nurses' Registry

Is now in the hands of Miss Flora Patzig, R. N. Phone number, Walnut 115.

The physicians in and about Des Moines should appreciate this effort on the part of the nurses as it gives them at all times, a quick means of securing the best nurses to be had.

Division of Fees.

In a paper read by Dr. J. W. Kime of Ft. Dodge and printed in this number of the Journal a long and continuous effort is made to set a standard for the "division of responsibility in referred cases."

The whole remedy seems to point to a "reasonable fee." If reasonable fees could be established and maintained the Dr. would not be far from a good guess, but he would soon have his old friend Miller reiterating the medical trust proposition with all its harrowing tales of oppression.

The Laity are immensely interested in this proposition. They don't propose to be bartered in their infirmity or sent to a specialist "just as good." They are getting wise the plan that has made many a surgeon famous in past years and they are asking now "Who is this man and why am I sent." The great specialist is reforming now, he is established and he can afford to reform. He has purchased his success. The friends of "purchased practice" can now demand a "just fee" for special work as a remedy for division of fees. This will prevent the next man from turning the trick.

Many of the foremost men in the A. M. A. and loudest for reform, have been most flagrant violators of the ethical code regarding advertising and fee splitting. Its different now; they have won.

Insanity Increasing.

The latest report from the Census Bureau shows an increase in insanity in the United States of 186.2 per 100,000 in 1904 to 203.8 per 100,000 in 1910.

Population has increased 10 per cent while the increase in insane hospitals has been 25 per cent.

The number of insane admitted to Iowa institutions in 1910 was less than in 1904.

Iowa insane amounted to 241 per 100,000 in 1910.

TRANSPOSED.

When Tommy had the tummyache
And the doctor came, said he,
"Are you in pain?" and Tommy sobbed,
"No, sir, the pain's in me." *January Lippincott's.*

SOCIETY REPORTS.

POLK

County Medical Society held its anual meeting December 19, 1911 in Des Moines at the Savery Hotel. This was also the occasion of the annual banquet and one hundred and twenty-five members and friends sat down together for an hour's enjoyment. Following the dinner Dr. Glomset read an excellent and interesting paper on cancer of the uterus (which appears in this issue of the Journal) illustrated with charts and slides.

Dr. W. L. Bierring was elected president. The secretary, Dr. T. F. Duhigg, and the treasurer, Dr. Nele Noble were re-elected. A most flattering report of the year's work and the general condition of the society was given.

DES MOINES

Pathological Society entertained at dinner, Dr. Dean Lewis of Chicago at their December meeting on the 8th; he in return entertained them with a lecture on Tumors of the Hyophysis.

MISSOURI VALLEY

Medical Society will meet early in March at Colfax. Dr. G. N. Ryan of Des Moines, chairman of the committee of arrangements is planning to use the big Hotel Colfax and as the sessions will continue three days, hopes to make the time pass pleasantly by introducing a house party plan. Clinics will be given in the hospitals in Des Moines the day following. Physicians of adjoining states are expected and all should have a good time. A part of the program is arranged for and we give it below. The complete program will appear in this Journal next month.

SYMPOSIUM ON TUBERCULOSIS.

"The role played by the Dispensary in the care and treatment of Tubercular patients," by DR. J. H. PECK, Des Moines.

"The present status of Tuberculosis in Iowa," by DR. J. W. KIME, Ft. Dodge, Iowa.

"The results of Koch's Tuberculin and Spengler's Immune Blood in the treatment of Tuberculosis," by DR. D. G. MENDENHALL, Des Moines.

"Tuberculosis from the standpoint of the Surgeon," by DR. CHARLES RYAN.

Dr. A. C. Stokes of Omaha is getting up a symposium on the diseases of the kidney, participated in by Drs. R. R. Hollister and A. C. Stokes. Dr. Jno. E. Summers will read a paper on "Haematuria;" Dr. Palmer Findley, "Puerperal Thrombo-Phlebitis; Dr. W. B. Kern, Ingleside, Nerbaska, "Remarks on Incipient Neuroses and Psychosis;" Dr. Arthur Steindler, "Arthritis Deformans;" Dr. Walter L. Bierring, "The Early and Late Diagnosis of Gastric Carcinoma;" Dr. S. G. Burnett and A. L. Skoog of Kansas City will present a symposium on "The Transcendency of Migraine."

MONONA

County Medical Society held its annual meeting at Onawa on Friday, December 8, 1911. Officers for 1912 were elected as follows: Dr. R. R. Gingles, of Onawa, president; Dr. A. L. Allison of Rodney, vice-president; Dr. Fred S. Spearman of Whiting, secretary; Drs. J. N. Hoit of Whiting, and E. Twining of Onawa, censors for three and two year term respectively; Dr. E. Twining, delegate to State Medical So-

ciety meeting, with Dr. Spearman, alternate. An address was delivered by Dr. E. Hornibrook of Cherokee, giving professional reminiscences of his own during fifty years of practice, and comparing past and present methods of education and practice, not always to the benefit of the present day. At the conclusion of the address, a vote of thanks was passed.

WRIGHT

County Medical Society held its last meeting in Clarion on December 20, 1911. A small attendance is reported. Officers elected for the year were: Dr. Best of Clarion, president; Dr. McNaughton of Eagle Grove, vice-president; Dr. Tompkins of Clarion, secretary and treasurer; Dr. Myers of Belmond, delegate to State Convention; Dr. Sams of Clarion, alternate. The next meeting will be held in Belmond in May, 1912.

JASPER

County Medical Society met on December 19, 1911, at Newton, Iowa, at which time they held their regular annual meeting. Some interesting papers were read and discussed. The following officers for the ensuing year were elected: President, Dr. E. F. Besser of Newton; vice-president, Dr. Perry Engle of Newton; secretary and treasurer, Dr. H. P. Engle of Newton; delegate to the State Convention, Dr. E. E. Boyd of Colfax; alternate, Dr. M. R. Hammer of Newton.

JOHNSON

County Medical Society elected officers at a meeting held in Iowa City last month. The following were chosen: President, Dr. Wm. F. Boiler of Iowa City; vice-president, Dr. C. W. Harned of Iowa City; secretary and treasurer, Dr. J. J. Lambert of IowaCity; censor, Dr. W. R. Whiteis of Iowa City; delegate to State Convention, Dr. Frank L. Love of Iowa City. Drs. Prentiss and Whiteis took up the subject of the open treatment of fractures, the former giving a demonstration.

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County Medical Society held its regular meeting in Clarinda on December 21, 1911. After the regular order of business had been disposed of, officers for the coming year were elected as follows: President, Dr. R. H. Sutton of Shenandoah; vice-president, Dr. R. J. Mathews of Clarinda; secretary-treasurer, Dr. B. S. Barnes of Shenandoah; censor, Dr. W. F. Stotler of Shenandoah; delegate to the State Convention, Dr. T. E. Powers of Clarinda. The next meeting will be in Shenandoah on Thursday, March 3, 1912.

CHICKASAW

County Medical Association held its meeting last month at New Hampton, Iowa, at which time the election of officers was held. Dr. L. Lewis of Bassett was elected president: Dr. H. D. Fallows of New Hampton, vice-president, and Dr. P. E. Gardner of New Hampton, secretary-treasurer.

MILLS

County Medical Association held its meeting last month at Malvern on December 9, 1911, the following officers were elected for the coming year: President, Dr. Edgar Christy of Hastings; vice-president, Dr. J. R. Scott of Malvern; secretary-treasurer, Dr. J. M. Donelan of Glenwood; delegate to the State Convention, Dr. J. G. McCue of Silver City; alternate, Dr. G. M. Agan of Glenwood; censor, Dr. S. A. Campbell of Malvern. The next meeting will be held in Silver City in June.

MUSCATINE

County Medical Society held its annual meeting for the election of officers in Muscatine on Friday evening, December 15, 1911, at which time the following officers were named for 1912: President, Dr. F. H.

Little ofMuscatine; vice-president, Dr. G. A. Heidel of Muscatine; second vice-president, Dr. H. H. English of Conesville; secretary-treasurer, Dr. W. H. Johnston of Muscatine; censor for three years, Dr. W. S. Norton of Muscatine; delegate to the State Convention, Dr. A. R. Leith of Wilton; alternate, Dr. H. M. Dean of Muscatine. Meetings will be held monthly during the winter.

WEBSTER

County Medical Society at its regular monthly meeting at Ft. Dodge in December elected the following officers for 1912: Dr. E. A. Acher of Ft. Dodge, president; Dr. W. F. Carver of Ft. Dodge, vice-president; Dr. J. F. Studebaker of Ft. Dodge, secretary-treasurer, and Dr. C. J. Saunders of Ft. Dodge, delegate to the State Convention.

MARION

County Medical Society held its twenty-eighth annual meeting at Knoxville on December 14, 1911. The election of officers for the coming year were: President, Dr. C. N. Bos of Pella; vice-president, Dr. H. L. Bridgman of Columbia; secretary, Dr. C. W. Cornell of Knoxville; censor, Dr. E. C. McClure of Bussey; delegate, Dr. C. F. Aschenbrenner of Pella; alternate, Dr. L. E. Park of Tracy.

The members thoroughly enjoyed the session. Adjourned to June 13, 1912.

ADAMS

County Medical Society met on December 21, 1911, at Corning. The following officers were elected for the coming year: Dr. F. P. Amdor of Carbon, president; Dr. J. H. Wallahan of Corning, vice-president; Dr. C. H. Bryant of Corning, secretary-treasurer. The regular meetings are in December and June.

SIOUX VALLEY

Medical Association's program has been issued for the meeting at Sioux City, January 24, and the following doctors will read papers: C. P. Howard, Iowa City; F. J. Murphy, Sioux City; W. H. Dewey, Moville; A. C. Stokes, Omaha, Nerbaska; L. J. Townsend, Sioux City; J. D. Griffith, Kansas City, Missouri; H. A. Tomlinson, St. Peter, Minnesota; Geo. F. Butler, Chicago, Illinois; Wm. E. Sanders, Des Moines, and Ralph H. Parker, Des Moines.

BOOK REVIEWS.

RETINOSCOPY

By JAMES THORINGTON, A. M., M. D., Author of "Refraction and How to Refract" etc., professor of diseases of the eye in the Philadelphia polyclinic and College for graduates in medicine, etc. Sixth addition, revised and enlarged, with sixty-one illustrations. P. Blakiston's Son & Co., Philadelphia, 1911. Price one dollar.

Judging from the fact that this is the Sixth Edition it must have met the approval of a large number of eye men. To the specialist it should be a fine aid.

PHYSICIANS VISITING LIST FOR 1912.

The sixty-first year of its publication. P. Blakiston's Son & Company. For 50 patients $1.25. In addition to a very satisfactory accounting system it contains many tables of interest to the physician.

CASE HISTORIES IN MEDICINE

Illustrating the diagnosis, prognosis and treatment of disease by RICHARD C. CABOT, M. D., Assistant Professor of Clinical medicine, Harvard Medical School. Second

Edition revised, etc. Price, $3. W. M. Leonard Publisher, Boston, 1911.

Dr. Cabot has prepared this book mainly for the general practitioner and has selected 100 cases to illustrate the general field which he has divided into nine chapters as follows: Infectious diseases, Diseases of gastro-intestinal and biliary tract, Diseases of the urinary tract, Diseases of the circulation, The respiratory system, The nervous system, etc. A final chapter, Notes on drug therapy, is of marked interest.

SCIENTIFIC FEATURES OF MODERN MEDICINE

By FREDERICK S. LEE Ph. D., Dalton Professor of Physiology, Columbia University. The Columbia University Press, New York, 1911.

This is a volume composed of the lectures given to the public in February and March, 1911, and compiled with the intent of interesting the layman as well as the medical student. It covers well the advancement in the medical field and offers many historical points of interest as well as the most recent developments in diagnosis and treatment.

MEDICAL NEWS NOTES.

The new $200,000 hospital at Waterloo will be ready for use in August.

Dr. Velura E. Powell of Red Oak, was a Journal visitor the early part of January.

The American hospital association holds its next meeting in Detroit, in September.

Dr. L. W. Dean of Iowa City, has been appointed director of the University Hospital.

Dr. Harry C. Payne of Pella, Iowa, is again actively engaged in the practice of medicine.

Dr. F. A. Osincup of Waverly, Iowa, is spending a month with his brother in New York state.

Dr. F. E. Rudolf of Davenport, Iowa, spent the month of December in Ocean Springs, Mississippi.

Dr. Wilton McCarthy of Des Moines has returned from a two month's stay in New York City.

Dr. F. L. Woodburn of Washington, Iowa, was reported quite ill with typhoid fever in December.

Dr and Mrs. W. F. David of Marshalltown, Iowa, are spending a two months vacation in California.

Dr. J. N. Porter of Prairie City, Iowa, spent Christmas and New Years with his daughters in Chicago.

Dr. R. B. Fields of LaPorte City, Iowa, has been appointed to the office of Health Physician of that place.

Dr. A. J. Cole of Britt, Iowa, has gone to Waukesha, Wisconsin, to try the mineral springs for rheumatism.

Dr. E. Burd of Lisbon, Iowa, attended the meeting of the C. & N. W. railway surgeons in Chicago last month.

Dr. and Mrs. H. C. Porter of Hedrick, left on January 2 for a trip to Mission, Texas, and other southern points.

Dr. Edith Gould Fosnes of St. Paul, Minesota, formerly of Des Moines, Iowa, spent Christmas with friends here.

Dr. O. S. Reiley of Red Oak, Iowa, was called to Greensburg, Indiana on December 25 by the death of his brother.

Dr. Lee Weber of Davenport, Iowa, has returned from a month's visit in the south. His family still remain, however.

Dr. J. W. Mulhern of Greenfield and son Vir, left December 27 for the south where they will spend a month or more.

Dr. W. C. Wagner of Traer, Iowa, was in Chicago last month attending a meeting of the C. & N. W. railway physicians.

Dr. C. W. Cornell of Knoxville, Iowa, was laid up with an attack of sciatic rheumatism for more than a week last month.

Dr. F. G. Ladd of Cedar Rapids, Iowa, is extending his field of medical practice by installing some modern appliances.

Dr. F. J. McAllister of Hawarden, Iowa, attended the meeting of the C. & N. W. railway surgeons in Chicago in December.

Dr. John Thomas of Monticello, Iowa, attended the wedding of his son in Baltimore, Maryland, on the 19th of December.

Dr. J. M. Sokol of Spencer, Iowa, attended the Alumni Association of the Cook County Hospital in Chicago, last month.

Dr. J. A. Devine had his first vacation since locating at Bancroft, when he spent Christmas with his parents at Sigourney, Iowa.

Dr. F. E. Sampson of Creston, has returned from his trip abroad, much rested and satisfied from the few months spent in Vienna.

Miss Aikin who a few years ago was superintendent of Methodist Hospital at Des Moines, is chairman of the non-commercial exhibits.

Dr. T. J. Myers of Mt. Pleasant, Iowa, and Dr. Ed Myers of Boone, spent Christmas with Rev. Chas. Myers at Chattanooga, Tenn.

Dr. E. C. Carhart of Mapleton, Iowa, has purchased property there and is converting it into a hospital. Mapleton is to be congratulated.

Dr. and Mrs. R. R. Morden of Des Moines were called to Chicago, the fore part of last month on account of the death of Mrs. Morden's father.

Dr. J. C. Wright and family of Clear Lake, Iowa, left the fore part of January for Florida where they will spend the remainder of the winter.

Dr. and Mrs. J. H. O'Donoghue of Storm Lake, Iowa, returned last month from Chicago where Mrs. O'Donoghue has been taking treatment.

Dr. H. M. Griffith and wife of Des Moines, have departed for Los Angeles, California, where they expect to remain during the remainder of the winter.

Dr. Chas. Burnside of Des Moines, has returned from New Mexico where he has been for some time and states that his health is wonderfully improved.

Dr. W. H. Bickley of Waterloo, Iowa, returned home on the fifteenth of last month from a trip to Salt Lake City and various other western points.

Dr. Joshua Worley of Belle Plaine, Iowa, had the misfortune to have a fire break out in his residence on December 18. The damage was very slight.

Drs. F. T. Stevens and C. F. Applegate, of Mt. Pleasant, Iowa, attended the meeting of the superintendents of state institutions held in Des Moines last month.

Dr. W. E. H. Barnes of Santa Ana, California, formerly of Creston, Iowa, still remembers his Iowa friends on New Years day with some California souvenir.

Dr. and Mrs. J. R. Guthrie of Dubuque, Iowa, have returned from their southern excursion and the Dr. reports restored health and a thoroughly enjoyable time.

Drs. J. F. Torpey, I. K. Gardner, P. E. Gardner and O. M. Landon of New Hampton, Iowa, attended a meeting of the Orthopedic Society in Mason City, last month.

Drs. C. E. Ruth and J. W. Cokenower, of Des Moines, attended the annual meeting of the Western Surgical Association in Kansas City, on December 18th and 19th.

Dr. W. A. Mirick's home in Monticello, Iowa, was injured by fire on the night of December 20, but fortunately the blaze was extinguished before much damage was done.

At a meeting of the board of directors of the Home of the Aged, on Friday, December 15, 1911, Drs. Carson and Messenger of Des Moines, were added to the staff of physicians.

Dr. Ralph Lovelady of Sidney, Iowa, has returned from Balitimore, Maryland, where he has been taking post graduate work and will be associated with his father and Dr. Corey.

Dr. G. M. Adair and wife of Anita, Iowa, have returned from Kansas City, Missouri, where they were in a sanitorium for some four weeks. A great improvement in health is reported.

Dr. and Mrs. L. G. Patty of Carroll, Iowa, returned last month from their visit in the east, where the doctor attended a clinical school in Philadelphia and visited other points of interest.

Dr. F. J. Corey of Sidney, Iowa, expects to take a three months post graduate course at Rush Medical College. On his return he will again take up his practice in connection with Drs. Lovelady.

Dr. J. C. Smith, formerly of Woolstock, Iowa, writes his friends there that unless he secures more definite relief from his asthma, he will return to that place and give up his residence in Florida.

Dr. M. N. Voldeng, superintendent of the state hospital for the insane of Cherokee, and a former Des Moines physician gave a unique entertainment to the patients under his care during Christmas week.

Dr. and Mrs. E. A. Merritt, formerly of Emmerson, Iowa, have returned from Chicago and are spending the month visiting in and around Red Oak prior to their going to their location at Council Bluffs.

The Polk County Medical Society at its meeting in December called the attention of the city council to danger of contamination of the Des Moines city water supply and asked for protection by a resolution.

Dr. N. Shilling of New Hampton, Iowa, returned on Christmas morning from Vienna, Austria, where he has spent the last year in the study of surgery under some of the best surgeons in European countries.

Drs. A. Crawford, J. B. Robinson, Kate A. M. Hogle, Geo. W. Hogle and M. W. Hill of Mt. Vernon, Iowa, attended the semi-annual meeting of the Iowa Union Medical Society at Cedar Rapids, last month.

Dr. M. Scanlon, a prominent physician of DeWitt, Iowa, had the misfortune to have his premises almost totally destroyed by fire on the morning of January 3, 1912, caused by an explosion of a gas lighting plant in his basement.

Dr. J. M. Knott of Sioux City, left that place on Sunday, January 7 for New York, from which place he sails on a trip around the world, in company with an organized party. His wife goes to California, where she will spend the winter months.

Dr. Chas. H. French of Cedar Rapids, Iowa, who came near losing his life through blood poisoning in his hand caused by scratching that member with a small piece of brass, has had one finger amputated and